SB 220
ALASKA SUSTAINABLE ENERGY ACT

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

AND

DEPARTMENT OF ADMINISTRATION

2011 PROGRESS REPORT

Submitted January 2012

EXECUTIVE SUMMARY

In accordance with AS 44.42.067(d), this is the FY11 Progress Report detailing the progress of the State of Alaska Department of Transportation and Public Facilities (DOT&PF) in reducing the state's energy consumption.

AS 44.42.067 requires the DOT&PF to retrofit at least 25 percent of all State of Alaska public facilities over 10,000 square feet no later than January 1, 2020. The milestones to accomplishing this include:

- Implementing a standardized method to collect energy consumption and cost data for facilities and generating Energy Use Indexes (AS 37.07.040 (12)).
- Identifying and prioritizing the least energy efficient facilities.
- Determining project scopes for energy retrofit work in those facilities that will meet net cost savings within 15 years.
- Working with the state agencies to arrange funding for the determined energy retrofit projects.
- Contracting with Energy Services Companies to perform energy performance contracts.
- Executing the energy retrofit projects and verifying the energy savings.
- Continuous monitoring of state energy consumption to be compared to levels of past years.

The DOT&PF is coordinating with the Alaska Housing Finance Corporation (AHFC), The Office of Management and Budget (OMB), and all State Agencies on the input of utility and building information into the Alaska Retrofit Information System (ARIS), an internet based platform. ARIS will be used by all State Agencies to collect and store energy consumption and cost data in order to determine facility energy usage and prioritization.

The DOT&PF has contracted with three Energy Service Companies (ESCOs) in a three-year term agreement to execute energy efficiency projects.

Initial funding of approximately $10M for energy efficiency retrofit projects comes from federal grant funding through the American Recovery and Reinvestment Act (ARRA). All of those funds have been committed to projects through the ESCO term agreement. The ARRA funds expire March 31, 2012 and current DOT&PF efforts are prioritized toward completion of these ARRA funded projects before the funding expiration deadline. The ARRA funded projects include 28 facilities and the projected annual energy savings is over $315,000.

The DOT&PF is also encouraging the funding of the future energy retrofit projects through the Alaska Energy Efficiency Revolving Loan Fund Program administered by the Alaska Housing Finance Corporation.

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1.0 INTRODUCTION

The State of Alaska Department of Transportation and Public Facilities (DOT&PF), in consultation with the Department of Administration, present this FY11 progress report to the legislature. Progress in this report includes work completed in 2011 and prior.

Utility Information for FY09 and FY10 for most buildings over 10,000 SF has been obtained from individual State Agencies by the DOT&PF. This information is being used to generate Energy Use Indexes (EUI) for the prioritization facility energy efficiency retrofit projects.

In 2010, DOT&PF was the recipient of a $10 million grant of ARRA funds through AHFC. That funding was split up between all State Agencies that own or maintain public facilities. This year, DOT&PF used the Energy Performance Term Agreement to advertise and construct five (5) projects that include 28 public facilities and 12 State Agencies. The projects included the requirement to produce an Investment Grade Energy Audits and Energy Service Proposals for implementation of energy efficiency improvements.

With the success of the ARRA funded projects, State Agencies have expressed interest in performing more projects that will save their facilities energy. The DOT&PF is making agencies aware of the Alaska Energy Efficiency Revolving Loan Fund program through AHFC. Six agencies have expressed interest in using the Loan Fund to finance their projects, while others will be using deferred maintenance funds.

Subsequent sections of this report will provide details about the term agreement with three Energy Services companies, work being performed with ARRA grant funds, current and past construction projects focusing on energy efficiency, the ARIS program that is being used to collect utility data, Energy Use Indices, and the DOT&PF's coordination with other agencies.

2.0 PROGRESS OF ENERGY EFFICIENCY RETROFIT PROJECTS

2.1 ENERGY SERVICES COMPANIES TERM AGREEMENTS

A Request for Proposal (RFP) for a term agreement with up to three Energy Service Companies (ESCOs) was advertised in October 2010 and selection of qualified ESCOs was made in January 2011. The three ESCOs selected are: Ameresco Federal Solutions, Inc., Honeywell International, Inc., and Siemens Industry, Inc. Contracts were executed in March 2011.

The ESCOs will perform investment grade energy audits, energy improvement projects and energy savings verification to state-owned facilities. Contracting with multiple ESCOs in the term agreement allows for competition for the energy retrofit projects and enables enough ESCOs to complete the foreseeable work load.

The ESCOs perform work in three phases:

- Phase I requires the completion of an investment grade audit and energy services proposal that identifies cost-effective recommended projects for the identified state facilities.

- Phase II requires the ESCOs to perform all management, engineering, design, construction, commissioning, and training necessary for the retrofit as identified in their energy services proposal.

- Phase III requires the ESCOs to measure and verify the guaranteed energy and water savings.

2.2 ACTIVE AND COMPLETED PROJECTS (2011)

2.2.1. AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) FUNDED PROJECTS

In October 2010, the DOT&PF received a $10 million in ARRA grant funding from the Alaska Housing Finance Corporation (AHFC) for energy efficiency improvements in State facilities. Current DOT&PF efforts are prioritized toward completion of these ARRA funded projects before the funding expiration deadline of March 31, 2012.

Sub-allocation of ARRA funding amongst State Agencies was done by the Office of Management and Budget (OMB), based upon square footage of agency owned buildings. The ARRA funded projects involve work in 28 State facilities with construction of energy efficiency improvements taking place in 25 of those facilities. Selection of facilities was based on energy usage, conditions of facility systems, and geographic considerations. Some facilities included are under the 10,000 sq. ft. threshold.

In March 2011 through July 2011, five Requests for Proposals (RFPs) were issued through the ESCO term agreement, resulting in twelve individual contracts (one contract per State Agency) to execute and accomplish this work.

Beyond the five RFPs through the ESCO term agreement, the Department of Health and Social Services (DHSS) is using ARRA funds for the Johnson Youth Center renovation and ground source heat pump installation under a separate construction contract.

The current overall projected monetized annual energy savings for the ARRA funded projects is over $315,000 per year. Projected annual energy savings of the project are[1]:

- *59,979 Therms of natural gas*
- *1,210,500 kWh of electricity*
- *19,360 Gallons of Fuel oil*
- *Over 1,600 tons of carbon dioxide (CO2)*

The facilities included in the ARRA funded projects and their associated project information is summarized in the following Table 1.

DOTPF PJ #	Contractor	State Agency	City	Facility	GSF	Projected Annual Energy Savings $[2]
83083-A	Siemens	DOC	Juneau	Lemon Creek Correctional Laundry	9,066	$9,024
			Ketchikan	Ketchikan Correctional	18,092	$12,766
		DEED	Sitka	MEHS Bldg 1331 Gym	53,826	$4,873
				Sheldon Jackson Museum	6,500	$3,447
		DOTPF-SR	Juneau	7-Mile Facility	53,700	$35,128
				AMHS Maintenance Bldg	5,000	$2,682
			Sitka	Sitka State & City Office	28,138	$4,584
			Ketchikan	Ketchikan State Court & Office	36,218	$8,371
83080-B	Ameresco	DOTPF-CR	Anchorage	Communications Bldg	12,432	$15,143
			Palmer	Palmer Maintenance Bldg	12,600	$25,839
		DOL-AVTEC	Seward	First Lake Facility	20,000	$32,576
				Student Services Center	30,926	[3]
				Applied Technology Bldg	30,279	[2]
		DNR	Palmer	Forestry Admin Bldg	15,678	$3,234
				Forestry Warehouse	18,000	$4,561
				Forestry Hanger	15,000	$7,442
		DFG	Cordova	Admin Bldg	3,920	$5,877
				Bunkhouse	3,876	$3,493
83080-C	Siemens	DOTPF-NR	Fairbanks	Peger Road HQ	21,900	$53,899
		DPS	Coldfoot	Cold Foot Hanger	4,053	$4,894

[1] Projected energy savings data provided from Investment Grade Energy Audits for each respective ESCO.

[2] Projected energy dollar savings data provided from Investment Grade Energy Audits for each respective ESCO.

[3] Investment Grade Energy Audit was completed; however implementation/construction not being done with ARRA funds.

			Fairbanks	AST Fairbanks Bldg	35,352	[2]
		DMVA	JBER	Anchorage Armory	210,283	$32,219
				Combined Support Maint. Bldg	70,000	[2]
83080-D	Siemens	DOA	Anchorage	Atwood Bldg	338,000	$22,742
			Juneau	Community Bldg	22,400	$7,832
83080-E	Ameresco	DHSS	Anchorage	McLaughlin Youth Center	60,705	*In-progress*
				Assets Bldg	24,310	*In-progress*
	Cornerstone		Juneau	Johnson Youth Center Renovations & Ground Source Heat Pump	13,363[4]	$15,183[5]

Table 1: Current ARRA funded projects *TOTAL* *$315,809*

[4] Building square footage is pre-renovation.

[5] Johnson Youth Center Project design team estimate of energy savings.

2.2.2 COMPLETED ENERGY EFFICIENCY PROJECTS (FY06 – FY11)

Completed energy retrofit projects include two energy performance contracts performed across multiple facilities (described in the January 2011 report to the Legislature) as well as other individual State Agency energy efficiency retrofit projects.

ENERGY PERFORMANCE CONTRACT PROJECTS

The DOT&PF has completed construction of two phases of energy performance contracts at state facilities. Phase I, including DOT&PF and DOA facilities, completed its last year of Measurement and Verification services (M&V) in 2010. Phase II included DOC facilities.

The DOC facilities and the reported annual monetary energy savings for the second year of M&V services are shown in the following Table 2.

Agency	**Facility**	**Location**	**Project Scopes and Status:**
DOC	Anchorage Correctional Center	Anchorage	*Energy performance contract services with guaranteed energy savings were performed by Siemens.* *Construction was completed in 2010.* *Currently, Siemens is monitoring the facility improvement measures that were put in place during the construction work. This is the second year of performance evaluations and the energy savings this year exceeded what was guaranteed.*
	Hiland Mt. / Meadow Creek Correctional Center	Eagle River	
	Spring Creek Correctional Center	Seward	
	Wildwood Correctional Center	Kenai	
	Fairbanks Correctional Center	Fairbanks	
	Lemon Creek Correctional Center	Juneau	
	Anvil Mt. Correctional Center	Nome	
	Yukon Kuskokwim Correctional Center	Bethel	
	Reported Annual Energy Savings	*3,556,556 kWh 38,173 Therms 66,294 Gal Fuel Oil*	
	Reported Annual Avoided Cost	***$948,628***	

Table 2: Energy Performance Contract – Phase II – Updated Energy Savings Reported from FY2010

INDIVIDUAL FACILITY ENERGY RETROFIT PROJECTS

State Agencies have also recently completed individual energy retrofit projects at the facilities shown in Table 3 below:

Agency	**Facility**	**Location**	**Project Scopes and Statuses:**
DHSS	Fairbanks Youth Facility	Fairbanks	Energy efficiency lighting upgrade completed in 2010, including replacement of existing fluorescent lighting with energy efficient fluorescent lighting throughout the facility. 32.6% reduction in usage. Payback 8 yrs.
DOC	Fairbanks Correctional Center	Fairbanks	Energy Efficient Boiler Upgrade including steam to hydronic conversion and fuel oil to natural gas conversion. Reduction in heating energy consumption. Completed in 2011.
DOA	Alaska Office Building	Juneau	Installation of new hallway light fixtures and emergency lights.

DOA	Atwood Building	Anchorage	Over the past 5 years several upgrades have been completed at the building including energy efficient lighting upgrade, energy efficient boiler upgrade, and replacement of the roof.
DOA	Community Building	Juneau	The boiler was added to the DDC system for more energy efficient control.
DOA	Court Plaza Building	Juneau	Over the past 5 years several upgrades have been completed at the building including replacement of the roof including under the AHU, energy efficient boiler replacement, installation of new lighting control system, and replacement of the air conditioning equipment and balancing of the air system on each floor.
DOA	Dimond Courthouse Building	Juneau	Over the past 5 years several upgrades have been completed at the building including replacement of window seals and curtain wall repairs, installation of a new roof, new chillers in basement and new chiller coils on roof including DDC, and replacement of ceiling and lighting in common areas.
DOA	Douglas Island Building	Juneau	Replacement of roof.
DOA	Fairbanks Regional Office Building	Fairbanks	Replacement of roof and installation of glycol heating system in garage roof to decrease heat loss from 1st Floor.
DOA	State Office Building	Juneau	Over the past 5 years several upgrades have been completed at the building including replacement of the deteriorated roof, installation of door at sky bridge on 8th floor & at 7th floor loading dock to minimize HVAC problems, installation of automated lighting system, energy efficient lighting upgrades in the parking garage, and energy efficient boiler upgrades including installation of new day tank, and modifications to the ventilation system.
DOA	Archives Building	Juneau	Over the past 5 years several upgrades have been completed at the building including the replacement of the roof, additional DDC, energy efficient lighting and controls upgrades.
DOA	Alaska State Museum	Juneau	Repair and replacement of failing roof
DOA	Governor's House	Juneau	Over the past 5 years several upgrades have been completed at the building including the replacement of the roof, exterior windows, and the air handling unit and additional DDC.
DOT	Northway Station & Airport	Northway	Energy efficient lighting upgrade
DOT	Montana Creek Station	Montana Creek	Installation of waste heat reclamation system.

DOT	Nome State Office Building	Nome	Installation of supplemental hydronic heat loop, which focuses heat to the extremities of the building without overheating the core.
DOT	Jim River Shop	Jim River	Energy efficient lighting upgrade
DOT	Central Station	Central	Upgraded heating system to boiler/hydronic system.
DOT	Nenana Station	Nenana	Upgrades heating system to boiler/hydronic system
DOT	Tazlina Station	Tazlina	Upgraded electrical service
DOT	Ernestine Station	Ernestine	Upgraded electrical service
DOT	Thompson Pass Station Old Shop	Thompson Pass	Energy efficient boiler upgrade.
DOT	Eagle Station Shop	Eagle	New roof with upgraded insulation
DOT	Peger SEF Shop	Fairbanks	New roof with upgraded insulation
DOT	Nelchina Station Shop	Nelchina	New roof increasing R-value

Table 3: Energy Retrofit Projects

3.0 ENERGY CONSUMPTION AND COST DATA COLLECTION

The Office of Management and Budget (OMB) has coordinated with the AHFC and the DOT&PF in the development of a standard methodology and software platform to collect energy consumption and expense data for state facilities. The Alaska Retrofit Information System (ARIS) was beta tested for most of the year, was released in Fall 2011, and made available for use by State Agencies in October 2011.

3.1 METHODOLOGIES OF UTILITY DATA COLLECTION

OMB has directed that each State Agency designate personnel to input facility energy consumption and cost information into ARIS. To date, eight State Agencies have designated users for the system and those users have been assigned usernames and passwords. Agencies are beginning to input utility information into ARIS.

In the future, ARIS will be able to generate reports that will be used to see the energy usage for individual facilities, for individual agencies, and for the State as a whole. As of now, they are working on that programming.

3.2 CURRENT CONSUMPTION AND COST

With the focus on getting ARIS online and accessible to all State Agencies, DOT&PF did not collect utility data from other agencies for FY11. Individual agencies will be responsible for entering the utility consumption and cost data for their respective facilities into the ARIS system.

The DOT&PF anticipates being able to use ARIS to give a report and analysis of energy consumption and cost in 2012, using the ARIS program.

3.3 ENERGY USE INDEXES (EUIS)

To determine current energy use of state facilities (over 10,000 square feet), the Energy Use Index (EUI) is generated, which assists in determining comparative energy use and energy efficiency of the facilities.

The EUI is a calculated number representing the annual total of all energy used per square foot of building area, represented as thousand BTUs per square foot (kBTUs /sq.ft.). The total energy consumption for the building comprises the electrical power, natural gas, heating fuel oil, and, in some specific sites, propane used to operate the building.

The energy consumed is converted into BTUs and divided by the square footage of the building. The EUI can then be used to compare and rank all facilities. The larger the EUI, the more energy consumed per square foot. Different types of facilities will have different EUIs based on their operational function, equipment, space usage and occupancies. For example, a health care or laboratory facility, an office facility, and a parking facility will all have very different EUIs, ranging from highest to lowest respectively.

Table 4 shows typical units for measuring the energy consumption.

Energy Source	Category	Measured In Units of	
Electrical Consumption	Electricity	Kilowatt-hours	kWh
Electrical Demand	Electricity	Kilowatt	kW
Natural Gas	Heating	Thousand Cubic Feet	ccf
Heating Fuel Oil	Heating	Gallons	gal
Propane	Heating	Gallons	gal

Table 4: Typical Energy Units

3.4 PROJECT PRIORITIZATION

The current method of determining project prioritization is to establish baseline EUIs using the most recent years of utility data, and to sort the facilities beginning by the least energy efficient. It is expected that the ARIS program will be able to assist in generating EUIs.

Priority will be given to facilities that are least energy efficient. However individual facility and department needs as well as the geographic locations of the facilities must also be considered.

Because completing the work as cost effectively as possible is essential, when commencing energy efficiency retrofit projects, the DOT&PF intends to group projects by geographic locations to the extent possible. This will assist in expediting project completions, reducing project costs, and maximizing project resources. However, it may mean one group of facilities includes multiple departments and multiple funding sources and that energy retrofits to facilities are not completed in exact order of their baseline EUIs.

4.0 COORDINATION WITH OTHER AGENCIES

The DOT&PF has continued to work closely with both the Alaska Housing Finance Corporation (AHFC) and Alaska Energy Authority (AEA); both close partners in the efforts to achieve the goals of SB220.

The DOT&PF is coordinating with AFHC and all state agencies in the efforts to input State facility data and utility information into the ARIS site and to coordinate the energy retrofit projects at those facilities.

AHFC has created and administering the Alaska Energy Efficiency Revolving Loan (AEERL) Fund Program. State agencies may use the loan program to fund the energy efficiency retrofits. The loans are expected to be repaid by the savings the facility sees due to the improvements to the energy efficiency.

AHFC, AEA and the DOT&PF are working together to gather data related to the energy efficiency of facilities throughout the state. AEA is primarily focused on private commercial and residential facilities, but will also be using the data the DOT&PF collects on state-owned facilities.

Both AEA's and AHFC's goal is to collect energy consumption data for public, commercial and residential facilities throughout the state to determine the State's total energy usage. The DOT&PF will assist in that effort by supplying the consumption data that the State Agencies collect for state-owned facilities.

APPENDIX

ARRA Project Spreadsheet Summary
ARIS AHFC Tutorial

83080: STATE ARRA FUNDED ENERGY EFFICIENCY PROJECTS
UPDATED: 11/18/2011

Project No.	Building	CO2 Reduction (Tons)	Projected Total Energy Savings ($)	Project Cost ($)		Simple Payback (Years)	Paid Invoices / Expenses	Pending Invoices	Total Expenses	Percent Spent	Contract Method	Contractor	IGA Complete	Current Phase	Implementation Contract Executed Date	Anticipated Substantional Completion Date	Anticipated Final Completion Date	Notes
83080-A	7-Mile Facility	103.1	$ 35,128	$ 470,217		13					PC	Siemens	Complete	Implementation	9/28/2011	1/5/2012	3/16/2012	Design and Construction in progress
	AMHS Maint Bldg	16	$ 2,682	$ 61,894		23										1/26/2012		
	Sitka State & City Office	36.8	$ 4,584	$ 168,372		37										12/29/2011		
	Ketchikan State Court & Office	36	$ 8,371	$ 505,755		60										2/2/2012		
		SUB-AGREEMENT: 83080-A DOTPF SR		**$ 1,275,319**		***<-Contract Value***	**$ 175,516**		***$ 175,516***	***14%***								
83080-A	Ketchikan Correctional Center	58.6	$ 12,766	$ 286,356		22					PC	Siemens	Complete	Implementation	9/28/2011	12/15/2011	3/15/2012	Design and Construction in progress
	Lemon Creek Correctional Laundry	41.8	$ 9,024	$ 2,227,212		247										3/22/2012		
		SUB-AGREEMENT: 83080-A DOC (ARRA Portion Only)		**$ 1,195,369**		***<-Contract Value***	**$ 405,913**		***$ 405,913***	***34%***								
83080-A	MEHS Gymnasium Bldg	38.3	$ 4,873	$ 188,192	0	38.61933101					PC	Siemens	Complete	Implementation	9/28/2011	12/30/2011	3/15/2012	Design and Construction in progress
	Sitka SJ Muesum	24.9	$ 3,447	$ 126,339	0	36.65187119										1/27/2012		
		SUB-AGREEMENT: 83080-A DEED		**$ 334,950**		***<-Contract Value***	**$ 68,019**		***$ 68,019***	***20%***								
83080-B	Palmer Vehicle Maintenance Shop	177.4	$ 25,839	$ 749,598		29					PC	Ameresco	Final Draft	IGA&ESP				Final IGA&ESP Reviewed and Returned to Ameresco
	Communications Bldg	104.8	$ 15,143	$ 417,709		28												Awaiting final IGA from Ameresco
		SUB-AGREEMENT: 83080-B DOTPF CR		**$ 1,275,292**		*This is the anticipated Sub-Agreement Amount*			***$ -***	***0%***								
83080-B	First Lake Facility		$ 32,576	$ 337,208		10					PC	Ameresco	Complete	Implementation	11/7/2011	2/8/2011	2/15/2012	Design and Construction in progress
		SUB-AGREEMENT: 83080-B AVTEC		**$ 334,950**		***<-Contract Value***		**$ 70,836**	***$ 70,836***	***21%***								
83080-B	Cordova Administration Bldg		$ 5,877	$ 216,427		37					PC	Ameresco	Complete	Implementation	10/17/2011	11/3/2011	2/15/2012	Construction in Progress
	Cordova Bunkhouse		$ 3,493	$ 116,260		33										12/5/2012		
		SUB-AGREEMENT: 83080-B DF&G		**$ 323,441**		***<-Contract Value***		**$ 187,103**	**$ 187,103**	***58%***								
83080-B	Forestry Palmer Admin Bldg	21.9	$ 3,234	$ 95,514		30					PC	Ameresco	Complete	IGA&ESP	11/16/2011	12/29/2011	2/15/2012	Design and Construction in progress
	Forestry Palmer Warehouse Bldg	22.2	$ 4,561	$ 75,784		17										1/11/2012		
	Forestry Palmer Hanger	50.3	$ 7,442	$ 148,094		20										1/10/2012		
		SUB-AGREEMENT: 83080-B DNR		**$ 334,950**		***<-Contract Value***		**$ 32,413**	***$ 32,413***	***10%***								
83080-C	Peger Road HQ Bldg	242.2	$ 53,899	$ 1,263,791		23					PC	Siemens	Complete	Implementation	11/14/2011	2/29/2012	3/31/2012	Contract Execution in Progress
		SUB-AGREEMENT: 83080-C DOTPF NR		**$ 1,274,413**		***<-Contract Value***		**$ 367,951**	***$ 367,951***	***29%***								
83080-C	Coldfoot Hanger	16.4	$ 4,894	$ 322,099		66					PC	Siemens	Complete	Implementation	11/14/2011	2/29/2012	3/31/2012	Contract Execution in Progress
		SUB-AGREEMENT: 83080-C DPS		**$ 333,535**		***<-Contract Value***			***$ -***	***0%***								
83080-C	Anchorage Armory	0	$ 32,219	$ 570,490		18					PC	Siemens	Complete	Implementation	11/14/2011	2/29/2012	3/31/2012	Contract Execution in Progress
	CSMS Bldg		$ -	$ 8,907		0												
		SUB-AGREEMENT: 83080-C DMVA		**$ 669,123**		***<-Contract Value***		**$ 253,882**	***$ 253,882***	***38%***								
83080-D	Atwood Bldg	155	$ 22,742	$ 786,039		35					PC	Siemens	95%	IGA&ESP				95% IGA received and in review
	Community Bldg	53.3	$ 7,832	$ 192,533		25												Juneau Community Bldg Lighting Upgrades to be State Funded
		SUB-AGREEMENT: 83080-D DOA (ARRA Portion Only)		**$ 956,370**		*This is the anticipated Sub-Agreement Amount*			***$ -***	***0%***								
83080-E	Assets Bldg										D/B	Ameresco	N/A	Implementation	10/12/2011			Design and Construction in progress
	McLaughlin Youth Center																	
		SUB-AGREEMENT: 83080-D DHSS		**$ 331,270**		***<-Contract Value***		**$ 56,184**	***$ 56,184***	***17%***								
Separate Contract	Johnson Youth Center		$ 15,183	**$ 820,000**		54		**$ 100,000**	$ 100,000		CM/GC	Cornerstone	N/A	Construction			3/31/2012	Construction in Progress.
CONTRACT TOTALS		**1,199**	**$ 315,809**	**$ 9,458,983**			**$ 649,448**	**$ 1,068,368**	**$ 1,717,816**									

DOT&PF CONTRACTS/TRAVEL/ADMIN	$ 86,500	$ 13,183
DOT&PF ICAP:	$ 353,601	$ -
TOTAL COMMITTED:	**$ 9,899,084**	
TOTAL PROGRAM FUNDED:	$ 9,958,000	
CURRENT UNCOMMITTED:	$ 58,916	
(For potential additional Contract sums, ICAP, AKWarm entry from ESCOs, Project Hidden Conditions, Etc.)		
TOTAL CURRENT EXPENSES: (Including invoices paid and received invoices pending payment)		**$ 1,730,999**

Abbreviation Key

PC:	Energy Performance Contract
D/B:	Design Build
CM/CG:	Construction Manager / General Contractor
ICAP:	Indirect Cost Allocation
IGA&ESP:	Investment Grade Audit & Energy Services Proposal

ARIS Commercial User Tutorial

Alaska Retrofit Information System (ARIS)

The following tutorial has been put together for State Users who will be responsible for entering and tracking State Facility Energy Usage.

Table of Contents:

Section 1

General Over View

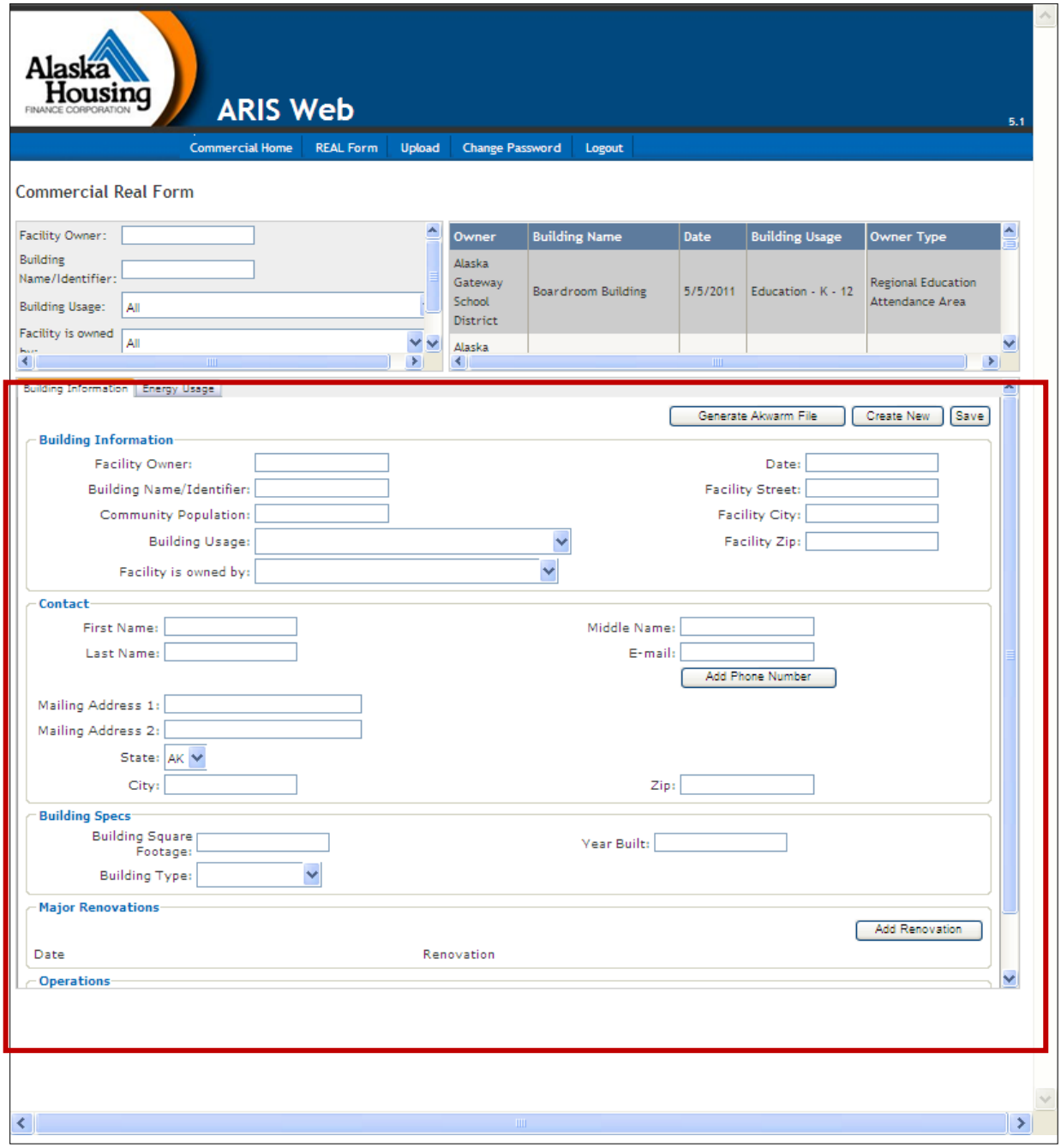
This section will provide a general overview of ARIS Web.

Clarification: All Images relate to the text directly above them

a) Log In: Go to: https://www.akrebate.com/Login.aspx and enter your user name and password.

b) Commercial Home: This will automatically bring you to the Commercial home page (Screen Shot below). So enter a building or edit a previously entered building, click in the "REAL Form" tab.

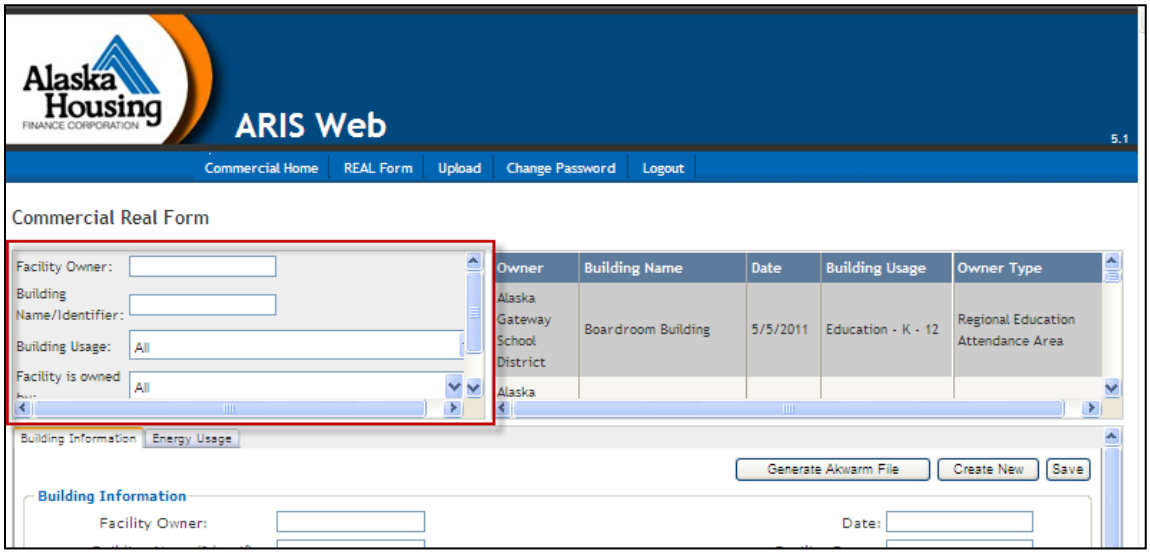
c) **Commercial REAL Form**: This form will appear below with several other boxes. Form may take a few moments to load. The bottom portion of this page is the actual REAL Form.



On the REAL Form page, there are several other components to note:

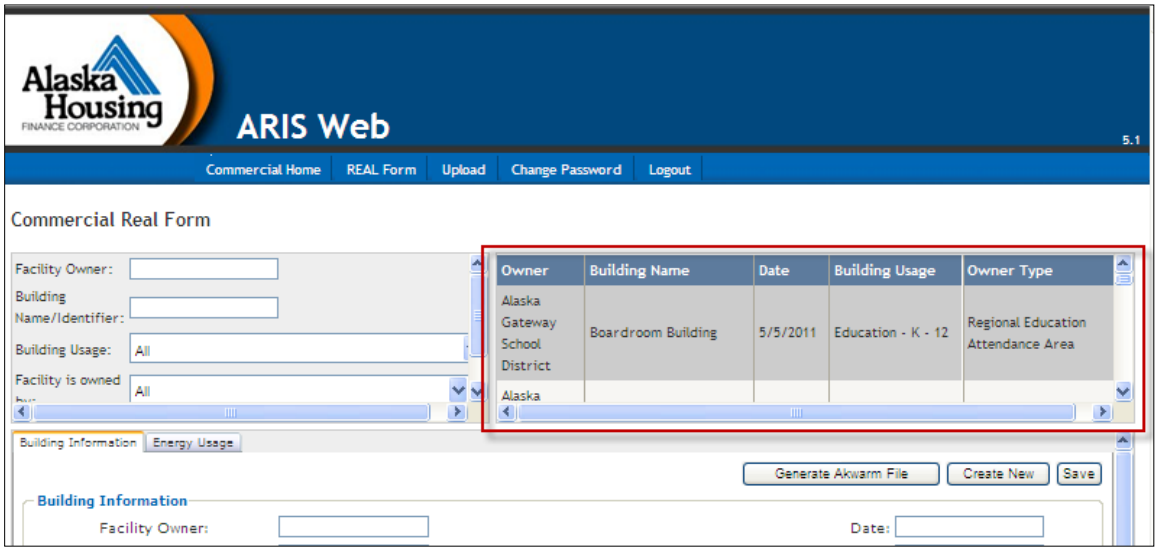
The Apply Filter Box – This box allows you to search for and open previously entered buildings. Allowing you to filter buildings by:

- Facility Owner
- Building Name/Identifier
- Building Usage



A List of previously entered buildings – This list will show buildings that have previously been entered into ARIS. Depending on your permissions, you may see buildings that have been entered by other State entities. Buildings will show up in columns by:

- Owner
- Building Name
- Date (This date is the date the file was created)
- Building Usage
- Owner Type



d) Upload

If you have been entering all of your data into the ARIS Excel form, you can upload the files here.

e) Change Password

To change your password, you will be prompted for your old password and then asked to enter your new password twice.

f) Log Out

To log out, click the log out tab and you will be logged out of the system and redirect you to the log in page shown above. The system automatically logs you out after a period of inactivity, so be sure to save your entries before you start a new project.

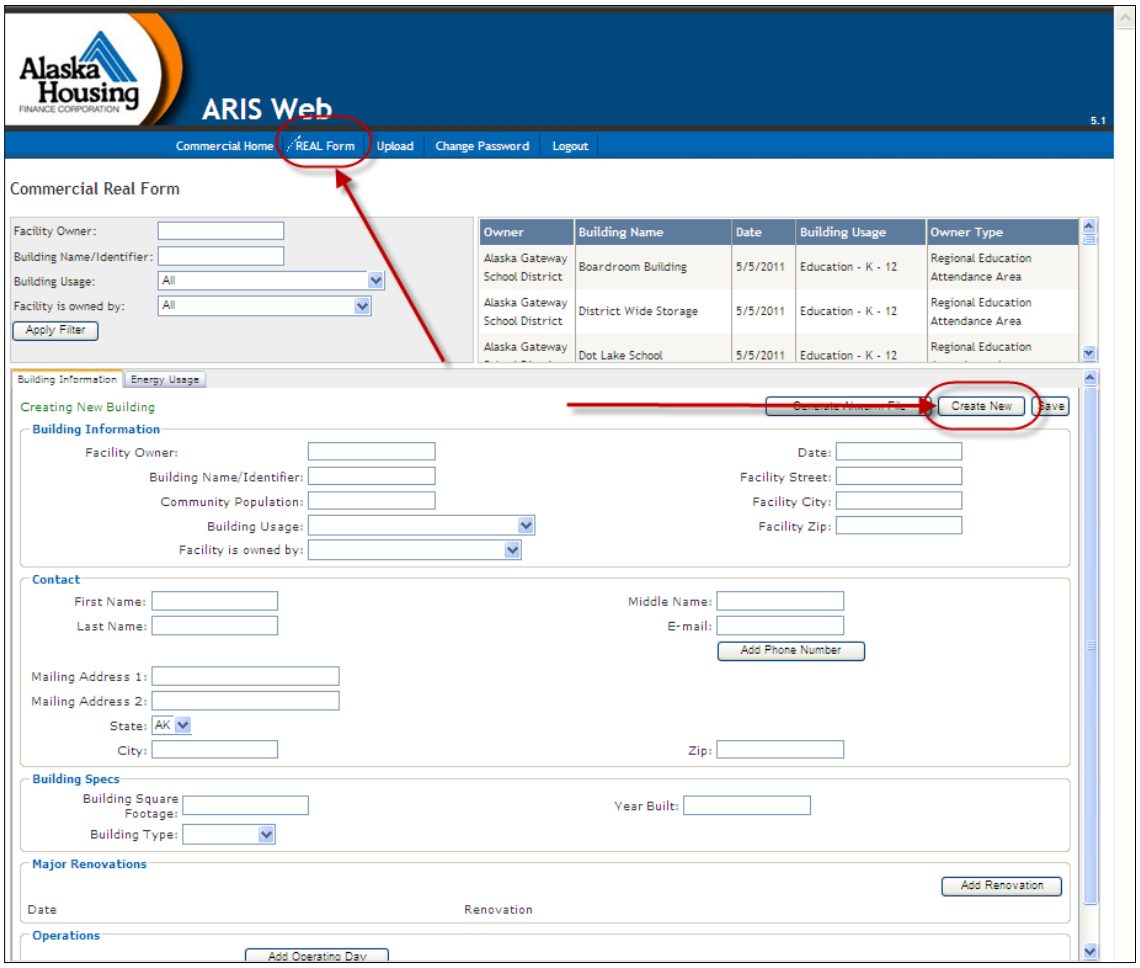
Section 2

How to Enter a New Building

This next section will walk you though how to enter in a new building. When entering a new building, the boxes above the "Building Information " and "Fuel Usage" tabs can be ignored.

Step 1: Start with a bank REAL Form

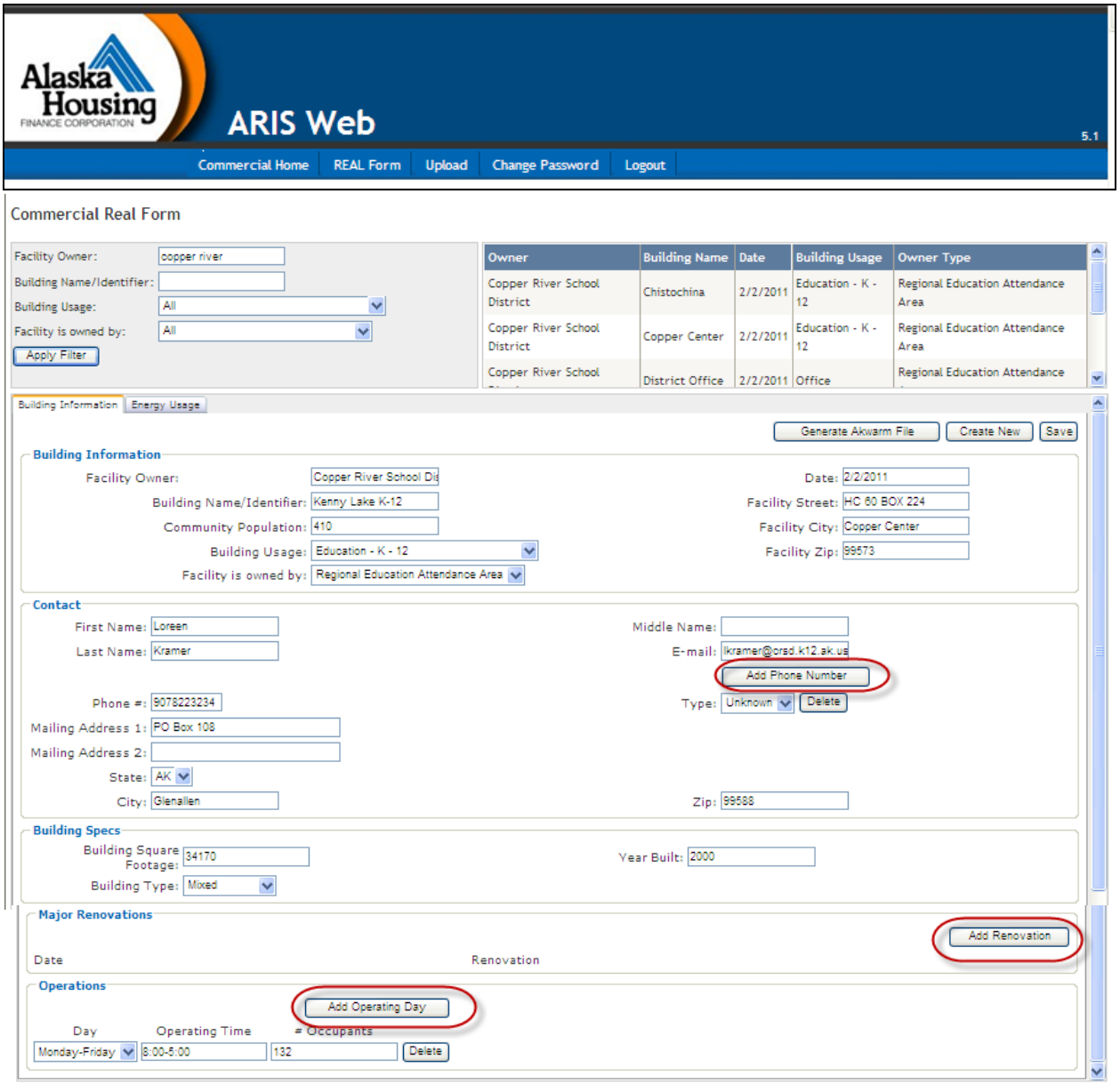
If information appears from an existing building search, this can be cleared by clicking the "REAL Form" tab to refresh the page, or by clicking the "Create New."



Step 2: Entering Building Information

Enter general building information into the blank fields provided. Please note the following:

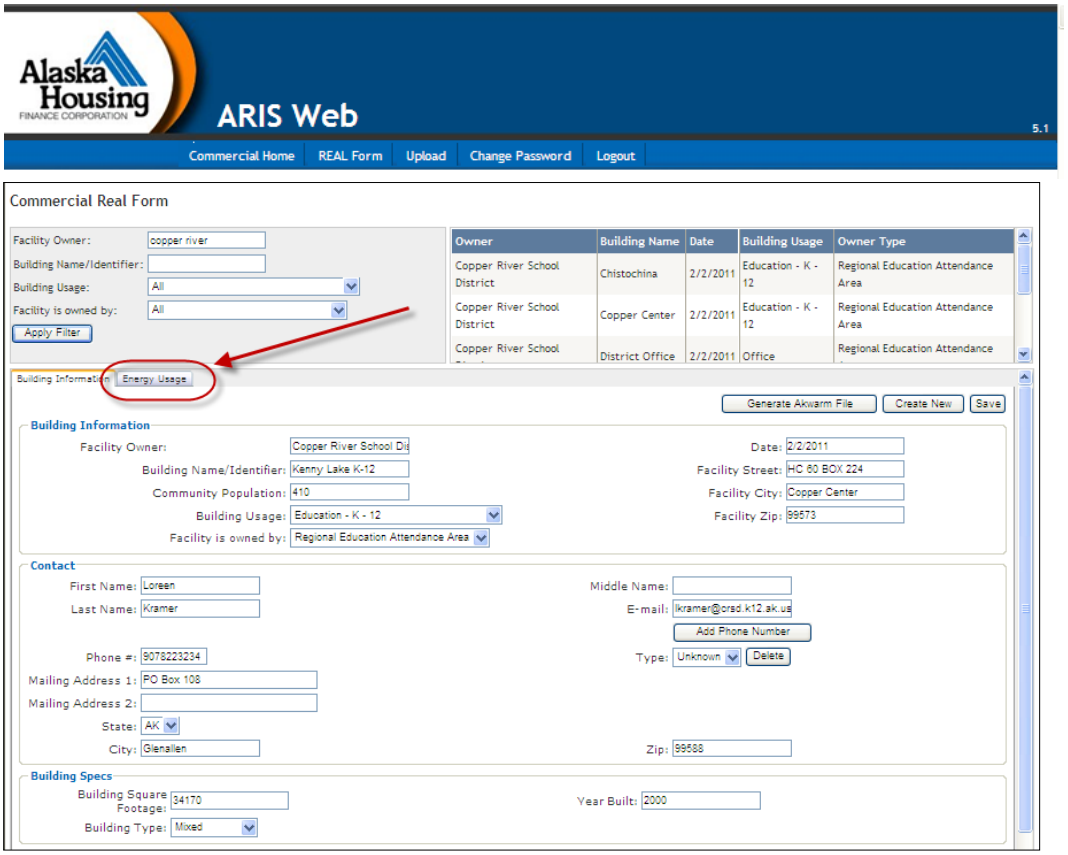
- For future searching purposes, it will be important to enter correct building names and uses. Use drop down menus where provided.
- Under Major renovations and operations, you will need to hit the "Add" button to add fields if you have numerous renovations or days with varying operational hours/occupants.
- For purposes of this tutorial, we will be using the Kenny Lake K-12 Facility as an example building. *Confidential data and information have been hidden in these examples.*



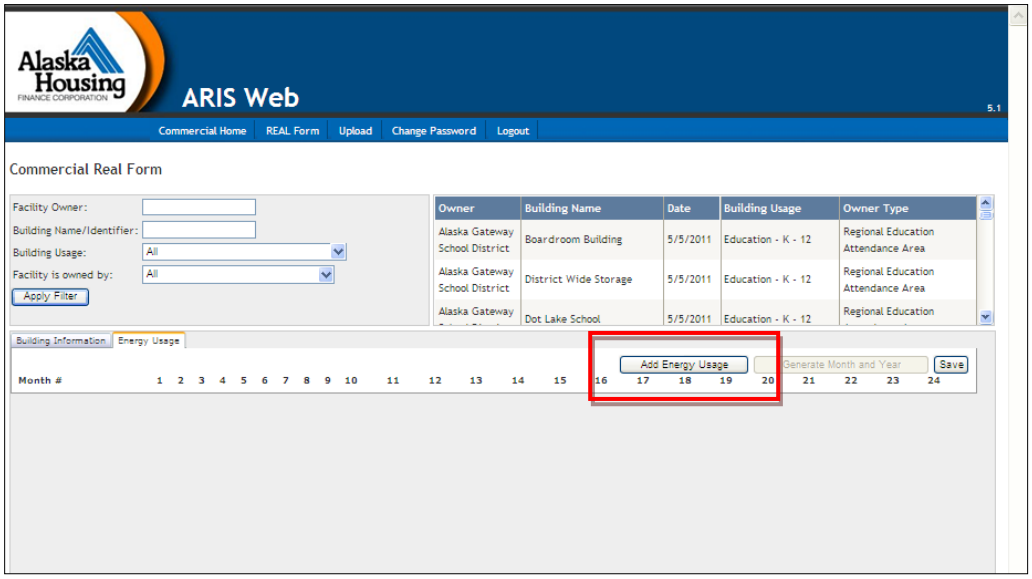
Step 3: Enter in Fuel Usage Information.

To enter in the fuel information follow steps a. through f.

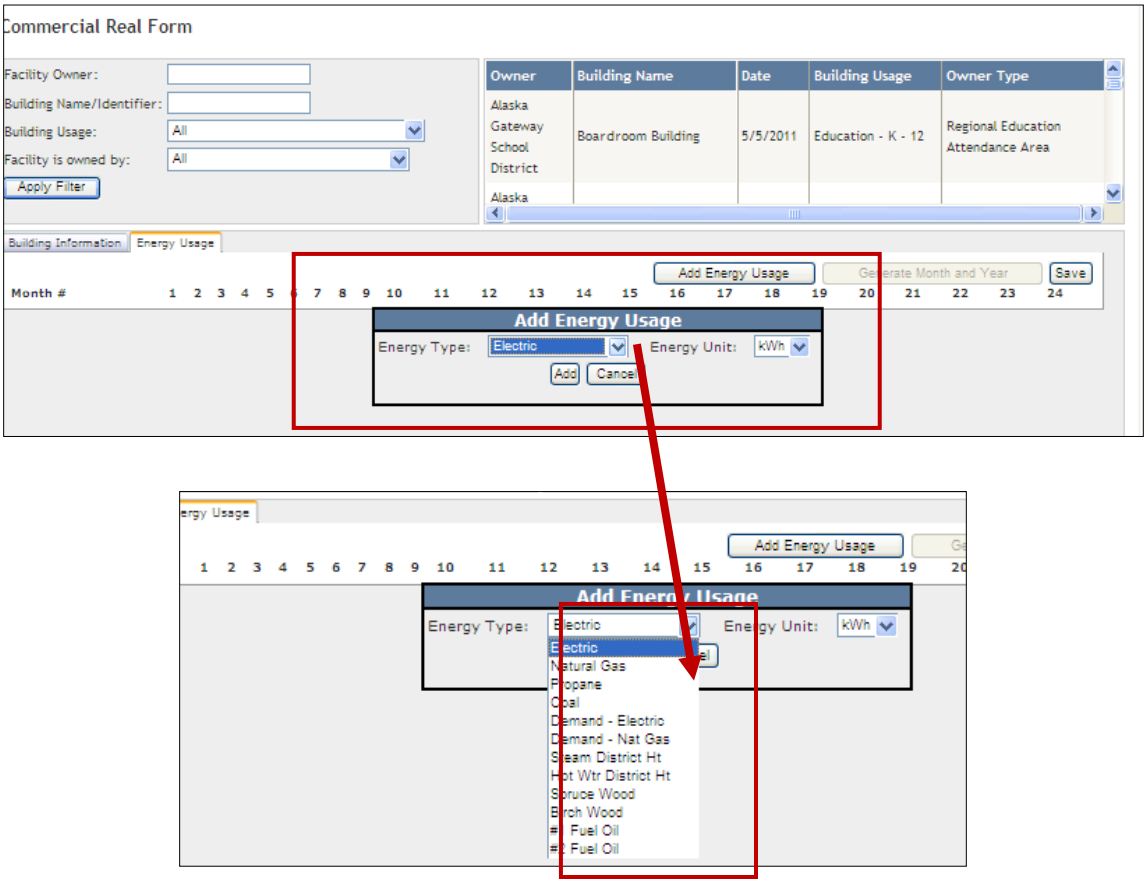
a. Go to the "Energy Usage" Tab on the REAL Form.



b. Once this tab loads, click the enter Energy Usage

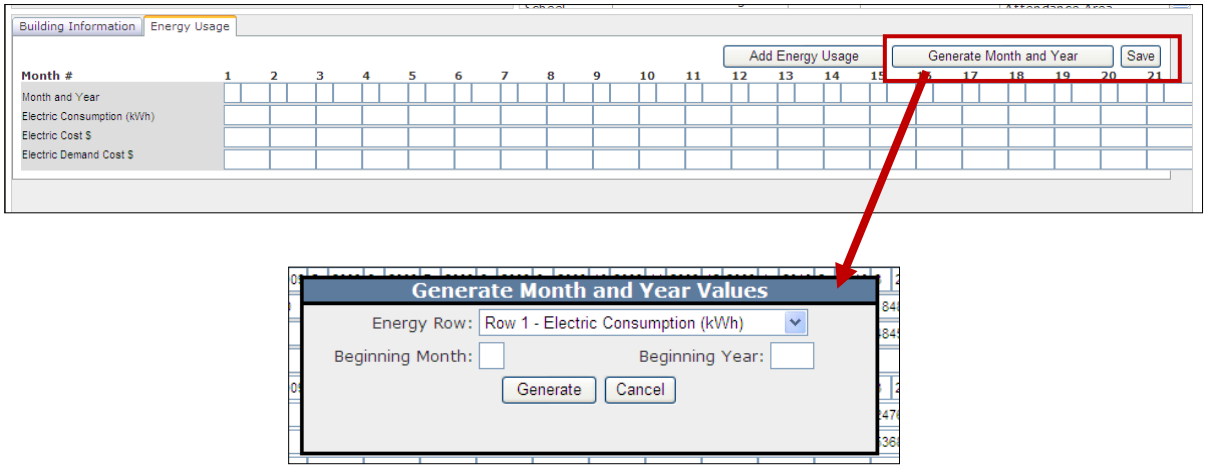


c. You will be prompted with an "Add energy Usage" Box; select appropriate types and units.

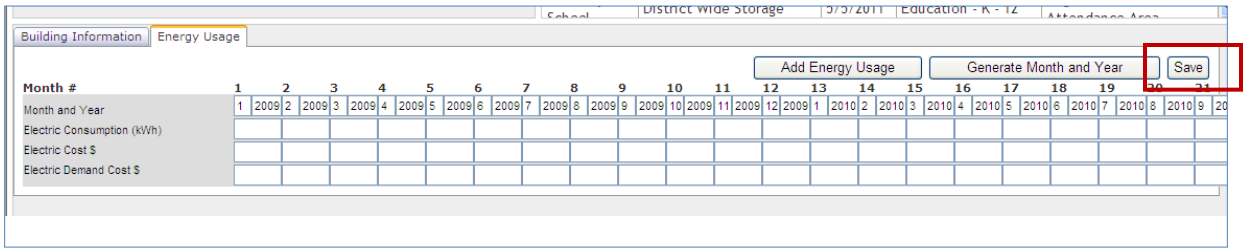


d. Once the Energy Type and Energy Unit are selected, select "Add." You will then see a grid as shown below. From here you can select "Generate Month and Year." By selecting Generate Month and year, you can choose the appropriate timeline for your data.

a. For "Beginning Month," enter a number between 1 and 12.
b. For "Beginning Year," enter a 4 digit year.
c. Click Generate and the dates will be automatically entered into the sheet below.



e. Once you have your grid with the month and year filled out, you can begin to enter in the Consumption, Cost, and if relevant, the demand cost. Be sure to hit “Save “when you are done.



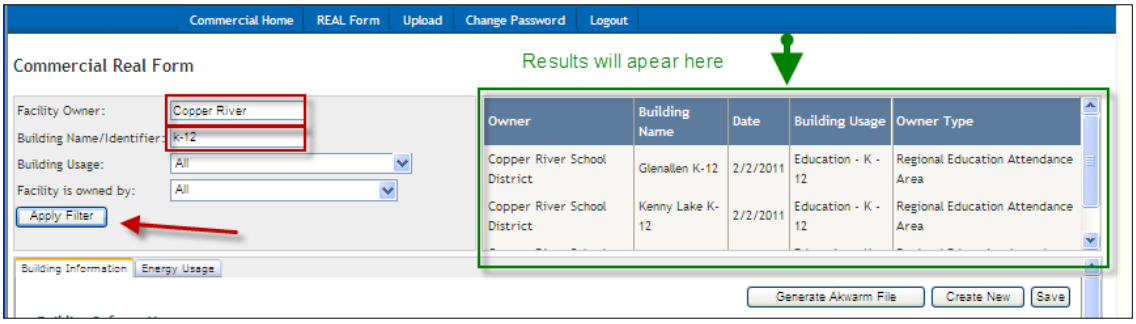
f. To add another Energy type or time period, simple select “Add Energy Usage.” And follow steps I-V.

Section 3

Search and Edit an Existing Building File

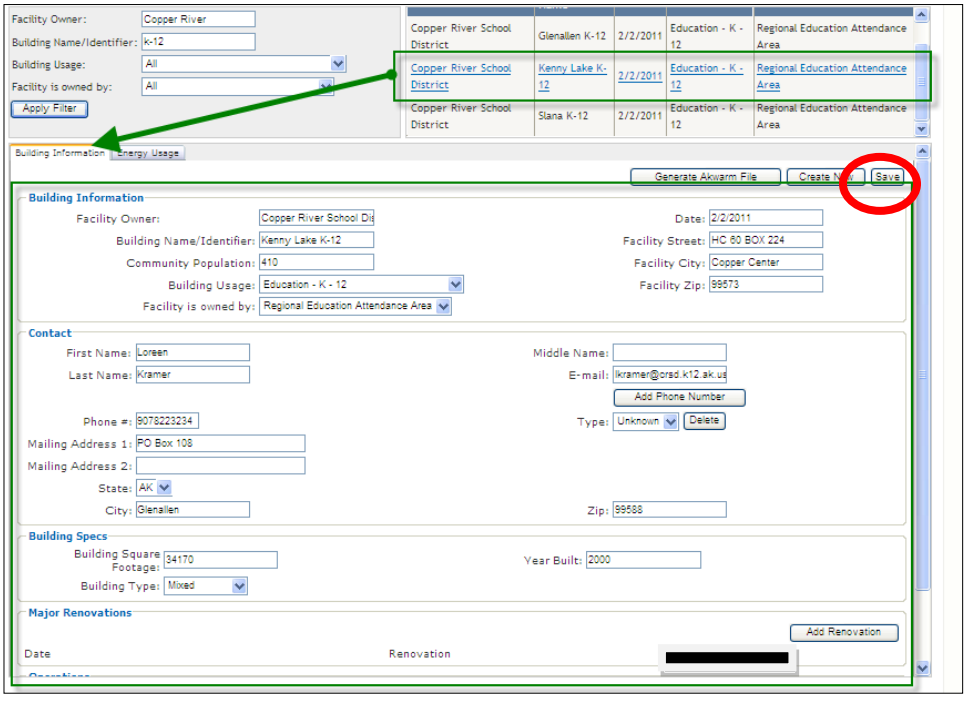
In this example we will search for "K-12" facilities owned by "Copper River."

Step 1: Enter in your search criteria and hit filter. Results appear in right-hand box.



Step 2: Select the building you would like to view.

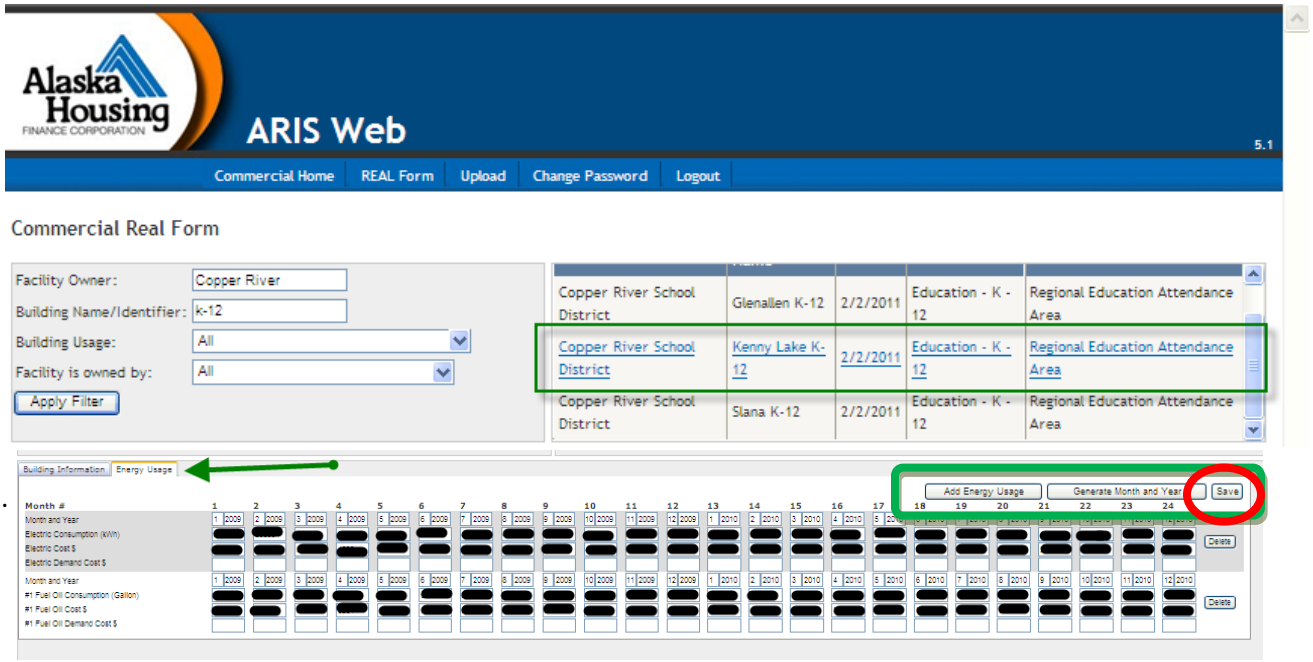
- We will be selecting "The Kenny Lake K-12."
- Once selected the related building text will turn blue and be underlined and the information available on this building will show up in the building information section of the REAL Form. *Confidential data and information have been hidden in these examples.*
- Under the **Building Information** Tab, you will be able to view and edit all previously entered data, such as Building Information, Contact Information, Building Specs, Major Renovations, and Operations.
- If you made Changes, be sure to hit Save before you navigate away from the page



Step 3: View/Edit Energy Usage data.

Under the **Energy Usage** Tab, you can view and edit entered fuel and electrical usage and costs that have been previously entered. For further information on how to edit, review Section 2, Step 3.

- Under Energy Usage Tab, you will be able to:
  - Edit previous data entered
  - Add Energy Usage (Add Rows across)
  - Generate Month and year (Apply date ranges to Added Energy Usage)
  - Save added data



For further assistance, contact AHFC Staff:

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