This workbook is designed to collect data regarding energy consumption at the AMPs in your PHA that received Capital Fund Recovery Grants under the grant program listed below.

Please complete all pages in the workbook.

The information portrayed in this sheet is split in three sections; please verify and complete the information where required. Note that the fields required to be completed are shaded in gray. The three sections are:

1. This is the General information page, requiring information regarding all AMPs at the PHA that received grants.
2. The "ECMs Details" pages provide information regarding the ECMs implemented as each AMP, based on data from the RAMPS system.
3. The "AMP - Utility" pages require entry of utility usage information for each energy source, at each AMP

1. General Public Housing Agency (PHA) Information

1. General Information	
Public Housing Agency (PHA) code:	
Grant Number	
Grant Program	

2. General PHA-AMPs information - please verify the information below and indicate the requested retrofit start and end dates, and the number of units retrofitted for each AMP

2.a. AMPs General Information	Retrofit Dates (MM/DD/YY)		Did this AMP also undergo retrofit financed through a Capital Fund Formula Grant?
Development/Asset Management Project (AMP) Number	Start	End	

AMP	Buildings	Utility used for heating in building	Utility used for cooling in building	Year of Last Retrofit

Are there any unusual features of these buildings or the retrofit you would like to note?

General Information

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
Doors and Windows	
EE Replacement Windows	
EE Replacement Exterior Doors	
EE Storm Doors	
EE Storm Windows	
EE Window Film	
Insulation and Air Sealing	
Attic or Roof Insulation	
Air Sealing	
Heating and Cooling	
Install Flue/Vent Dampers	
Install Constant Air Regulating Dampers	
Convert to Electronic Ignition	
Replace Inefficient Heating Plant	
Insulate Hot Water or Steam Pipes	
Seal and Insulate Ducts	
Replace Inefficient Central Air Conditioners	

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
Replace HVAC Pump Motors	
HVAC/Temperature Controls	
Install Boiler Controls/Outdoor Air Reset	
Install Radiator Controls (Units)	
Install Programmable Thermostats (Units)	
Domestic Hot Water	
Insulate Hot Water Tanks	
Convert Laundry to Cold Rinse	
Replace Inefficient Hot Water Heater	
Install Summertime DHW Heaters	
Lighting	
Replace Incandescent Lighting with CFLs (Units) Install LED Exit Signs	
Replace Outdoor and Common Area Lighting Fixtures Install Outdoor and Common Area Lighting Controls	

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
Appliances	
Replace inefficient Refrigerators	
Replace Inefficient Clothes Washers	
Replace Inefficient Window AC Units	
Replace Inefficient Dishwashers	
Water Conservation	
Install Water-saving Toilets	
Low-flow Showerheads and Faucet Aerators	
Grey Water Recycling	
Renewable Energy	
Install Photovoltaic Panels	
Install Cogeneration/Micro Combined Heat and Power Systems	
Green measures	
Install Green Roofs	

AMP 1 - ECMs Details

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
Use Low or No-VOC Paints	
Use of Green Building Products	
Install Spot Ventilation	
Install advanced utility metering	

* Data to be pulled from RAMPS

PHA - AMP Utility Consumption: ELECTRICITY

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

ELECTRICITY

Please use the drop-down menu to indicate whether tenants pays for this utility for their units.

Do tenants pay their electricity bill directly to the utility for any units in the AMP?	
How many electricity meters are there for which the PHA has usage data in this AMP?	
Do these meters cover the electricity usage in all common areas of the AMP?	

For each utility meter, please inidcate ID, location, whether the meter was utilized prior to the retrofit, and whether it was utilized after the retrofit. In addition, using the drop-down menu, please indicate if the meter measures consumption in common areas only, in units only, or in both common areas and units.

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Meter Location (Building address)					
Meter ID					
Used Pre-retrofit: Yes/No					
Used Post-retrofit: Yes/No					
Meter measures utility consumption in the following areas:					
Number of units covered by meter					
Number of units in building					

PHA - AMP Utility Consumption: ELECTRICITY

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

ELECTRICITY

For each utility meter, please indicate the exact start and end dates of the pre and post retrofit utility consumption data provided

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Pre-retrofit Start Date Consumption data (MM/DD/YYYY)					
Pre-retrofit End Date Consumption data (MM/DD/YYYY)					
Post-retrofit Start Date Consumption data (MM/DD/YYYY)					
Post-retrofit End Date Consumption data (MM/DD/YYYY)					

For each utility meter, please use the drop-down menu to indicate the first month of pre-retrofit consumption data (this month should be exactly one year prior to the start of the retrofit implementation). The remaining 11 months will be automatically populated.
In addition, for each month pre-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Pre-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	KWH	Month	KWH	Month	KWH	Month	KWH	Month	KWH
Month 1	June		September		January		February		November	
Month 2	July		October		February		March		December	
Month 3	August		November		March		April		January	
Month 4	September		December		April		May		February	
Month 5	October		January		May		June		March	
Month 6	November		February		June		July		April	
Month 7	December		March		July		August		May	
Month 8	January		April		August		September		June	
Month 9	February		May		September		October		July	

AMP 1 - Electricity

PHA - AMP Utility Consumption: ELECTRICITY

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

ELECTRICITY

Month 10	March		June		October		November		August	
Month 11	April		July		November		December		September	
Month 12	May		August		December		January		October	

For each utility meter, please use the drop-down menu to indicate the first month of post-retrofit consumption data. The remaining 11 months will be automatically populated.
In addition, for each month post-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Post-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	KWH	Month	KWH	Month	KWH	Month	KWH	Month	KWH
Month 1	July		September		July		June		November	
Month 2	August		October		August		July		December	
Month 3	September		November		September		August		January	
Month 4	October		December		October		September		February	
Month 5	November		January		November		October		March	
Month 6	December		February		December		November		April	
Month 7	January		March		January		December		May	
Month 8	February		April		February		January		June	
Month 9	March		May		March		February		July	
Month 10	April		June		April		March		August	
Month 11	May		July		May		April		September	
Month 12	June		August		June		May		October	

AMP 1 - Electricity

PHA - AMP Utility Consumption: NATURAL GAS

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

NATURAL GAS

Please use the drop-down menu to indicate whether tenants pays for this utility for their units.

Do tenants pay their natural gas bill directly to the utility for any units in the AMP?	
How many natural gas meters are there for which the PHA has usage data in this AMP?	
Do these meters cover the natural gas usage in all common areas of the AMP?	

For each utility meter, please inidcate ID, location, whether the meter was utilized prior to the retrofit, and whether it was utilized after the retrofit. In addition, using the drop-down menu, please indicate if the meter measures consumption in common areas only, in units only, or in both common areas and units.

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Meter Location (Building address)					
Meter ID					
Used Pre-retrofit: Yes/No					
Used Post-retrofit: Yes/No					
Meter measures utility consumption in the following areas:					
Number of units covered by meter					
Number of units in building					

For each utility meter, please indicate the exact start and end dates of the pre and post retrofit utility consumption data provided

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Pre-retrofit Start Date Consumption data (MM/DD/YYYY)					

AMP 1 - Natural Gas

PHA - AMP Utility Consumption: NATURAL GAS

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

NATURAL GAS

Pre-retrofit End Date Consumption data (MM/DD/YYYY)					
Post-retrofit Start Date Consumption data (MM/DD/YYYY)					
Post-retrofit End Date Consumption data (MM/DD/YYYY)					

For each utility meter, please use the drop-down menu to indicate the units in which utility consumption is measured

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Consumption measuring units:					

For each utility meter, please use the drop-down menu to indicate the first month of pre-retrofit consumption data (this month should be exactly one year prior to the start of the retrofit implementation). The remaining 11 months will be automatically populated.
In addition, for each month pre-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Pre-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	0	Month	0	Month	0	Month	0	Month	0
Month 1	June		September		January		February		November	
Month 2	July		October		February		March		December	
Month 3	August		November		March		April		January	
Month 4	September		December		April		May		February	
Month 5	October		January		May		June		March	
Month 6	November		February		June		July		April	
Month 7	December		March		July		August		May	
Month 8	January		April		August		September		June	
Month 9	February		May		September		October		July	
Month 10	March		June		October		November		August	
Month 11	April		July		November		December		September	

AMP 1 - Natural Gas

PHA - AMP Utility Consumption: NATURAL GAS

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

NATURAL GAS

Month 12	May		August		December		January		October	

For each utility meter, please use the drop-down menu to indicate the first month of post-retrofit consumption data. The remaining 11 months will be automatically populated.
In addition, for each month post-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Post-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	0	Month	0	Month	0	Month	0	Month	0
Month 1	July		September		July		June		November	
Month 2	August		October		August		July		December	
Month 3	September		November		September		August		January	
Month 4	October		December		October		September		February	
Month 5	November		January		November		October		March	
Month 6	December		February		December		November		April	
Month 7	January		March		January		December		May	
Month 8	February		April		February		January		June	
Month 9	March		May		March		February		July	
Month 10	April		June		April		March		August	
Month 11	May		July		May		April		September	
Month 12	June		August		June		May		October	

AMP 1 - Natural Gas

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
Doors and Windows	
EE Replacement Windows	
EE Replacement Exterior Doors	
EE Storm Doors	
EE Storm Windows	
EE Window Film	
Insulation and Air Sealing	
Attic or Roof Insulation	
Air Sealing	
Heating and Cooling	
Install Flue/Vent Dampers	
Install Constant Air Regulating Dampers	
Convert to Electronic Ignition	
Replace Inefficient Heating Plant	
Insulate Hot Water or Steam Pipes	
Seal and Insulate Ducts	
Replace Inefficient Central Air Conditioners	
Replace HVAC Pump Motors	

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
HVAC/Temperature Controls	
Install Boiler Controls/Outdoor Air Reset	
Install Radiator Controls (Units)	
Install Programmable Thermostats (Units)	
Domestic Hot Water	
Insulate Hot Water Tanks	
Convert Laundry to Cold Rinse	
Replace Inefficient Hot Water Heater	
Install Summertime DHW Heaters	
Lighting	
Replace Incandescent Lighting with CFLs (Units) Install LED Exit Signs	
Replace Outdoor and Common Area Lighting Fixtures Install Outdoor and Common Area Lighting Controls	
Appliances	
Replace inefficient Refrigerators	
Replace Inefficient Clothes Washers	

This worksheet describes the retrofit conducted in this AMP as a result of the grant under study. This information is from the RAMPS system, and is provided for your reference.

PHA Identifier	
AMP Identifier	

Energy Conservation Measures Implemented	Units Affected
Replace Inefficient Window AC Units	
Replace Inefficient Dishwashers	
Water Conservation	
Install Water-saving Toilets	
Low-flow Showerheads and Faucet Aerators	
Grey Water Recycling	
Renewable Energy	
Install Photovoltaic Panels	
Install Cogeneration/Micro Combined Heat and Power Systems	
Green measures	
Install Green Roofs	
Use Low or No-VOC Paints	
Use of Green Building Products	
Install Spot Ventilation	
Install advanced utility metering	

* Data to be pulled from RAMPS

PHA - AMP Utility Consumption: ELECTRICITY

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

ELECTRICITY

Please use the drop-down menu to indicate whether tenants pays for this utility for their units.

Do tenants pay their electricity bill directly to the utility for any units in the AMP?	
How many electricity meters are there for which the PHA has usage data in this AMP?	
Do these meters cover the electricity usage in all common areas of the AMP?	

For each utility meter, please inidcate ID, location, whether the meter was utilized prior to the retrofit, and whether it was utilized after the retrofit. In addition, using the drop-down menu, please indicate if the meter measures consumption in common areas only, in units only, or in both common areas and units.

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Meter Location (Building address)					
Meter ID					
Used Pre-retrofit: Yes/No					
Used Post-retrofit: Yes/No					
Meter measures utility consumption in the following areas:					
Number of units covered by meter					
Number of units in building					

PHA - AMP Utility Consumption: ELECTRICITY

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

ELECTRICITY

For each utility meter, please indicate the exact start and end dates of the pre and post retrofit utility consumption data provided

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Pre-retrofit Start Date Consumption data (MM/DD/YYYY)					
Pre-retrofit End Date Consumption data (MM/DD/YYYY)					
Post-retrofit Start Date Consumption data (MM/DD/YYYY)					
Post-retrofit End Date Consumption data (MM/DD/YYYY)					

For each utility meter, please use the drop-down menu to indicate the first month of pre-retrofit consumption data (this month should be exactly one year prior to the start of the retrofit implementation). The remaining 11 months will be automatically populated.
In addition, for each month pre-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Pre-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	KWH	Month	KWH	Month	KWH	Month	KWH	Month	KWH
Month 1	June		August		May		February		November	
Month 2	July		September		June		March		December	
Month 3	August		October		July		April		January	
Month 4	September		November		August		May		February	
Month 5	October		December		September		June		March	
Month 6	November		January		October		July		April	
Month 7	December		February		November		August		May	
Month 8	January		March		December		September		June	
Month 9	February		April		January		October		July	

PHA - AMP Utility Consumption: ELECTRICITY

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

ELECTRICITY

Month 10	March		May		February		November		August
Month 11	April		June		March		December		September
Month 12	May		July		April		January		October

For each utility meter, please use the drop-down menu to indicate the first month of post-retrofit consumption data. The remaining 11 months will be automatically populated.
In addition, for each month post-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Post-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	KWH	Month	KWH	Month	KWH	Month	KWH	Month	KWH
Month 1	July		September		July		June		November	
Month 2	August		October		August		July		December	
Month 3	September		November		September		August		January	
Month 4	October		December		October		September		February	
Month 5	November		January		November		October		March	
Month 6	December		February		December		November		April	
Month 7	January		March		January		December		May	
Month 8	February		April		February		January		June	
Month 9	March		May		March		February		July	
Month 10	April		June		April		March		August	
Month 11	May		July		May		April		September	
Month 12	June		August		June		May		October	

AMP 2 - Electricity

PHA - AMP Utility Consumption: NATURAL GAS

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

NATURAL GAS

Please use the drop-down menu to indicate whether tenants pays for this utility for their units.

Do tenants pay their natural gas bill directly to the utility for any units in the AMP?	
How many natural gas meters are there for which the PHA has usage data in this AMP?	
Do these meters cover the natural gas usage in all common areas of the AMP?	

For each utility meter, please inidcate ID, location, whether the meter was utilized prior to the retrofit, and whether it was utilized after the retrofit. In addition, using the drop-down menu, please indicate if the meter measures consumption in common areas only, in units only, or in both common areas and units.

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Meter Location (Building address)					
Meter ID					
Used Pre-retrofit: Yes/No					
Used Post-retrofit: Yes/No					
Meter measures utility consumption in the following areas:					
Number of units covered by meter					
Number of units in building					

For each utility meter, please indicate the exact start and end dates of the pre and post retrofit utility consumption data provided

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Pre-retrofit Start Date Consumption data (MM/DD/YYYY)					

PHA - AMP Utility Consumption: NATURAL GAS

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

NATURAL GAS

Pre-retrofit **End Date Consumption data** **(MM/DD/YYYY)**					
Post-retrofit **Start Date Consumption data** **(MM/DD/YYYY)**					
Post-retrofit **End Date Consumption data** **(MM/DD/YYYY)**					

For each utility meter, please use the drop-down menu to indicate the units in which utility consumption is measured

	Meter 1	Meter 2	Meter 3	Meter 4	Meter 5
Consumption measuring units:					

For each utility meter, please use the drop-down menu to indicate the first month of pre-retrofit consumption data (this month should be exactly one year prior to the start of the retrofit implementation). The remaining 11 months will be automatically populated.
In addition, for each month pre-retrofit, please indicate the exact consumption as indicated in your utility bill.

	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
Monthly Consumption **Pre-retrofit**	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	**0**	**Month**	**0**	**Month**	**0**	**Month**	**0**	**Month**	**0**
Month 1	January		November		April		February		November	
Month 2	February		December		May		March		December	
Month 3	March		January		June		April		January	
Month 4	April		February		July		May		February	
Month 5	May		March		August		June		March	
Month 6	June		April		September		July		April	
Month 7	July		May		October		August		May	
Month 8	August		June		November		September		June	
Month 9	September		July		December		October		July	
Month 10	October		August		January		November		August	
Month 11	November		September		February		December		September	

AMP 2 - Natural Gas

PHA - AMP Utility Consumption: NATURAL GAS

This sheet requests specific information regarding monthly utility consumption for one full year before and one full year after the implementation of the retrofit.
Please provide the requested information in the shaded cells

PHA Identifier	
AMP Identifier	

NATURAL GAS

Month 12	December		October		March		January		October	

For each utility meter, please use the drop-down menu to indicate the first month of post-retrofit consumption data. The remaining 11 months will be automatically populated.
In addition, for each month post-retrofit, please indicate the exact consumption as indicated in your utility bill.

Monthly Consumption Post-retrofit	Meter 1		Meter 2		Meter 3		Meter 4		Meter 5	
	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption	DATE	Consumption
	Month	0	Month	0	Month	0	Month	0	Month	0
Month 1	July		September		July		June		November	
Month 2	August		October		August		July		December	
Month 3	September		November		September		August		January	
Month 4	October		December		October		September		February	
Month 5	November		January		November		October		March	
Month 6	December		February		December		November		April	
Month 7	January		March		January		December		May	
Month 8	February		April		February		January		June	
Month 9	March		May		March		February		July	
Month 10	April		June		April		March		August	
Month 11	May		July		May		April		September	
Month 12	June		August		June		May		October	

AMP 2 - Natural Gas