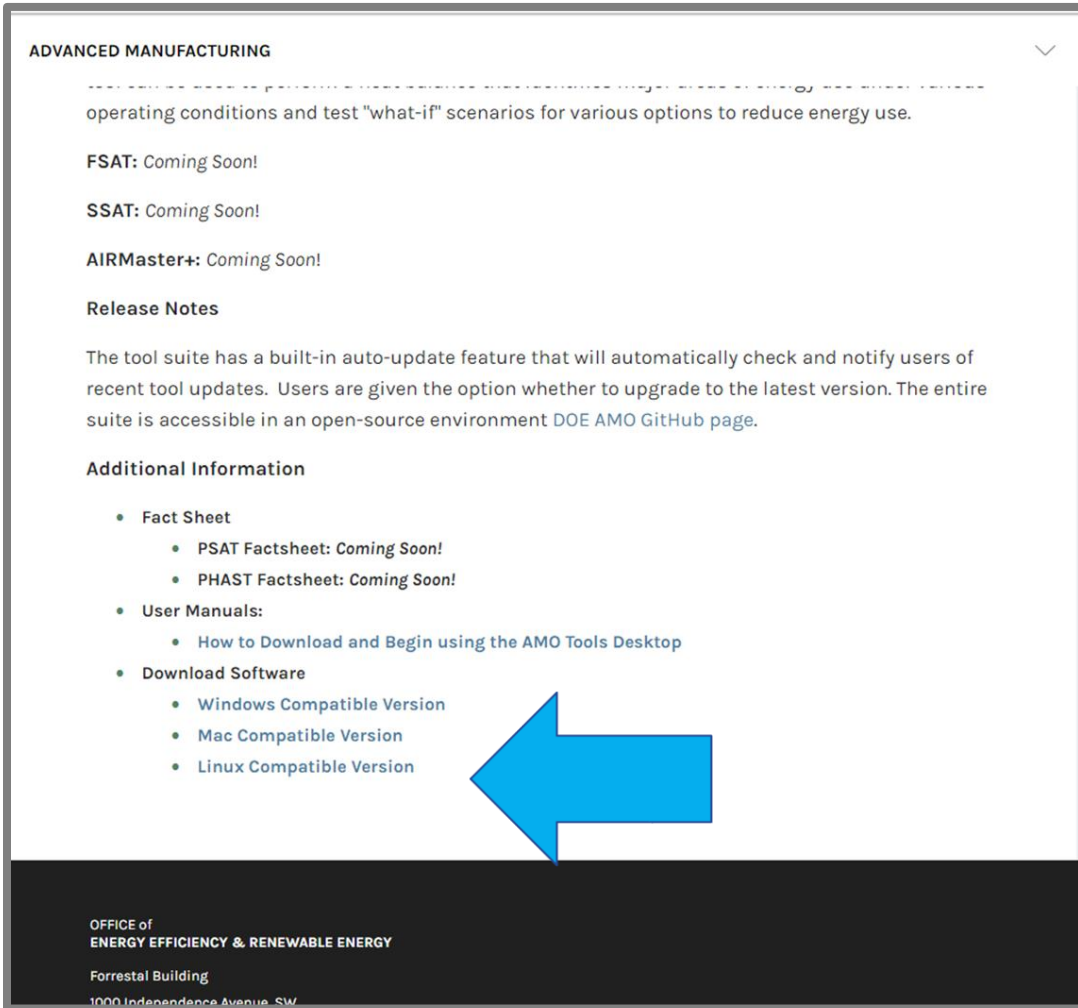




How to Download and Begin using MEASUR: The Manufacturing Energy Assessment Software for Utility Reduction



Download via DOE-EERE- AMO website



ADVANCED MANUFACTURING

operating conditions and test "what-if" scenarios for various options to reduce energy use.

FSAT: *Coming Soon!*

SSAT: *Coming Soon!*

AIRMaster+: *Coming Soon!*

Release Notes

The tool suite has a built-in auto-update feature that will automatically check and notify users of recent tool updates. Users are given the option whether to upgrade to the latest version. The entire suite is accessible in an open-source environment DOE AMO GitHub page.

Additional Information

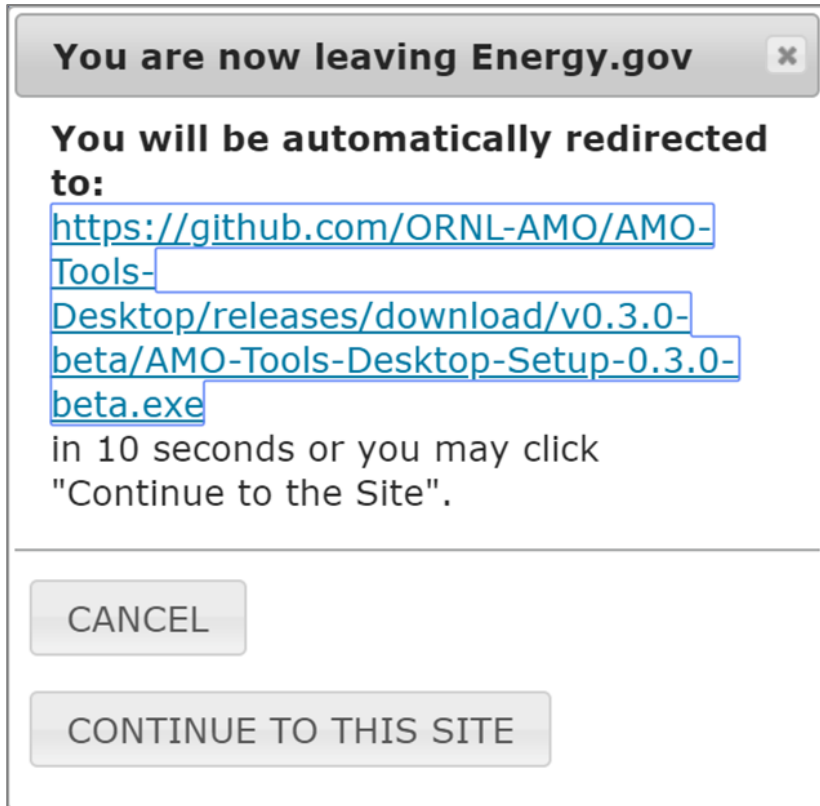
- Fact Sheet
 - PSAT Factsheet: *Coming Soon!*
 - PHAST Factsheet: *Coming Soon!*
- User Manuals:
 - How to Download and Begin using the AMO Tools Desktop
- Download Software
 - Windows Compatible Version
 - Mac Compatible Version
 - Linux Compatible Version

OFFICE of
ENERGY EFFICIENCY & RENEWABLE ENERGY

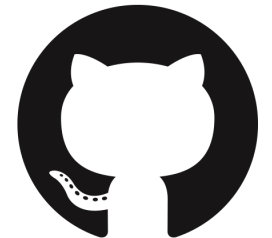
Forrestal Building
1000 Independence Avenue, SW

- <https://www.energy.gov/eere/amo/measur>
- Includes overview of the effort to reprogram our legacy tools
- Scroll to the bottom to find and download your version

Download via DOE-EERE- AMO website

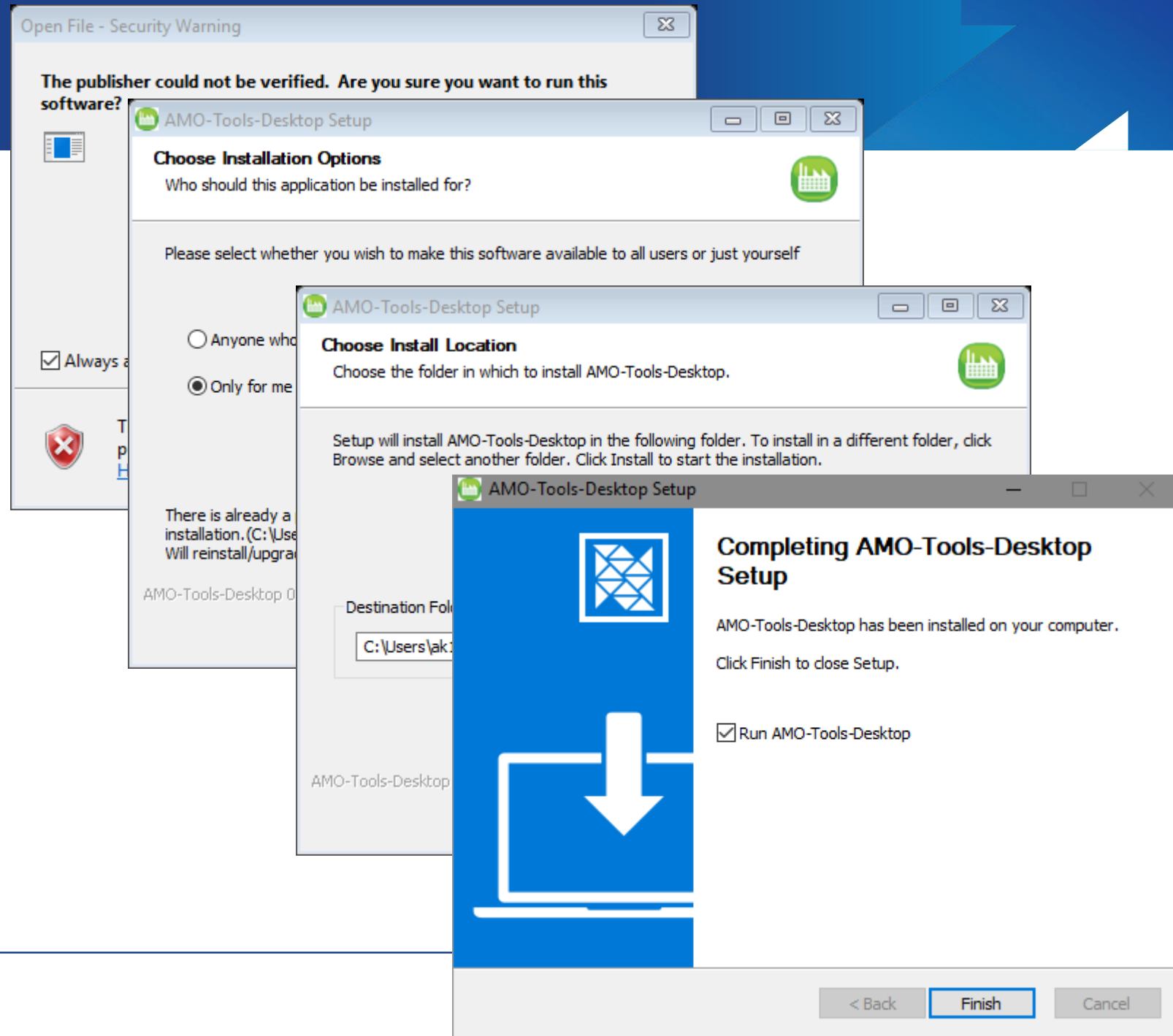


- This message will appear indicating that the file you are downloading is hosted on another website.
- That web site is GitHub, the common repository for software applications and is perfectly safe.



Download

- Click the file extension that matches your operating system
- Open the download
- Click “Run”
- Follow the instructions for the Installation Wizard
- If updating via the webpage DO NOT uninstall first



Updating

- This Tool is in beta, so we are constantly upgrading it and publishing releases fairly often.
- After installation, if an update becomes available, a popup will appear at startup to notify you.
 - You can choose to update right away, or you can wait.
 - If for some reason this does not happen, you can download from the AMO Tools Download Center
- **DO NOT UNINSTALL** before updating, you will lose **ALL** your assessments.

Getting Started



Welcome to the most efficient way to manage and optimize your plant's systems and equipment.

Create an assessment to model your system and find opportunities for efficiency or run calculations from one of our many property and equipment calculators.
Get started with one of the following options.



Create Assessment

Model a system and explore multiple optimization scenarios.



Create Pump Assessment

formerly DOE Pumping System Assessment Tool (PSAT)



Create Process Heating Assessment

formerly DOE Process Heating Assessment and Survey Tool (PHAST)



Create Fan Assessment

formerly DOE Fan System Assessment Tool (FSAT)

[View All Your Assessments](#)

Properties & Equipment Calculators

Generate detailed properties and test a variety of adjustments.

[Motors](#)

[Pumps](#)

[Fans](#)

[Process Heating](#)

[Steam](#)

[Compressed Air](#)

[General](#)

[Add Assessment](#)

Home

- All Assessments
 - Examples
 - Extra case studies

All Calculators

- Motors
- Pumps
- Fans
- Process Heating
- Steam
- Compressed Air
- General

Settings

- Custom Materials
- Tutorials
- About
- Contact
- Acknowledgments

v0.3.0-beta

Can Start an assessment via several buttons

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Getting Started

The screenshot shows the MEASUR web application interface. In the top left, the U.S. Department of Energy logo and the text "Energy Efficiency & Renewable Energy" are visible. A dark blue button labeled "Add Assessment" is prominent. A light blue callout box with an arrow points to this button and another "Add Assessment" button in the left sidebar, containing the text: "Can Start an assessment via several buttons".

In the center, a "Create New Assessment" modal window is open. It contains the following fields and options:

- Assessment Name:** A text input field with "New Assessment" entered. Below it, an example reads: "Example: 'Pump123' or 'ORNL Pump 3'".
- Assessment Type:** A dropdown menu with "Pump" selected.
- Folder Location:** A dropdown menu with "All Assessments/" selected. Below it is a link: "Add a new folder for this assessment".
- Buttons for "Close" and "Add Assessment".

A green callout box with an arrow pointing to the modal window contains the text: "Using the Green Arrows will make a popup for you to name your assessment, choose type, and folder location".

The background of the application shows a navigation menu on the left with categories like "Home", "All Calculators", "Motors", "Pumps", "Fans", "Process Heating", "Steam", "Compressed Air", "General", "Settings", "Custom Materials", "Tutorials", "About", "Contact", and "Acknowledgments". The main content area features a "Welcome" message and several "Create" buttons for different assessment types: "Create Process Heating Assessment" (formerly DOE Process Heating Assessment and Survey Tool (PHAST)), "Create Fan Assessment" (formerly DOE Fan System Assessment Tool (FSAT)), "Create Motor Assessment" (formerly DOE Motor Assessment Tool (MAT)), and "Create Compressed Air Assessment" (formerly DOE Compressed Air Assessment Tool (CAAT)). There is also a "View All Your Assessments" link at the bottom.

Getting Started



Add Assessment

Home

- All Assessments
- Examples
- Extra case studies

- All Calculators
- Motors
- Pumps
- Fans
- Process Heating
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- Compressed Air
- General

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U.S. DEPARTMENT OF ENERGY
Energy Efficiency & Renewable Energy

Home

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v0.3.0-beta

All Assessments / Extra case studies

Add Assessment Add Pre-Assessment Add Folder Generate Report Delete Export Import Select all folder content

EXTRA CASE STUDIES INFO

Comp	ORNL	Facility	ORNL	Date	8/14/2018
------	------	----------	------	------	-----------

[View Details](#) [Edit Info](#)

EXTRA CASE STUDIES SUMMARY

Type	Assessments	Annual Energy Used	Annual Energy Cost
Pumps	3	6,508.68 kWh	\$373,614.00
Process Heating	3	3,472,440 MMBtu	\$35,678,552.74
Fans	2	15,659.6 kWh	\$939,573.03
Total	8	3,472,510 MMBtu	\$36,991,739.76

EXTRA CASE STUDIES SETTINGS

Units of Measure	Imperial
Fuel Cost	\$3.99 /MMBtu
Steam Cost	\$4.69 /MMBtu
Electricity Cost	\$0.07 /kWh

[Edit Settings](#)

Will take you to the home page

Can still access this button

Following the Blue Arrows will bring you to the Dashboard where you can view existing assessments or add a new assessment

Getting Started



Add Assessment

The screenshot displays a web application interface for energy assessments. At the top, there's a breadcrumb trail: **All Assessments / Extra case studies**. Below this is a toolbar with buttons: **Add Assessment**, **Add Pre-Assessment**, **Folder**, **Generate Report**, **Delete**, **Export**, and **Import**. A blue arrow points to the **Folder** button. To the right of the toolbar is a checkbox labeled **Select all folder content**.

The main content area is divided into several sections:

- EXTRA CASE STUDIES INFO:** A table with columns for **Company** (ORNL), **Facility** (ORNL), and **Date** (8/14/2018). It includes links for **View Details** and **Edit Info**.
- EXTRA CASE STUDIES SUMMARY:** A table with columns: **Type**, **Assessments**, **Annual Energy Used**, and **Annual Energy Cost**.

Type	Assessments	Annual Energy Used	Annual Energy Cost
Pumps	3	6,508.68 kWh	\$373,614.00
Process Heating	3	3,472,440 MMBtu	\$35,678,552.74
Fans	2	15,659.6 kWh	\$939,573.03
Total	8	3,472,510 MMBtu	\$36,991,739.76
- EXTRA CASE STUDIES SETTINGS:** A table with columns: **Units of Measure** (Imperial), **Fuel Cost** (\$3.99 /MMBtu), **Steam Cost** (\$4.69 /MMBtu), and **Electricity Cost** (\$0.07 /kWh). It includes a link for **Edit Settings**.

Below these sections are four assessment cards:

- FURNACES:** Number of Furnaces: 3; Annual Energy Used: 548.54 MMBtu; Annual Energy Cost: \$4,336.47. Includes a **Show / Edit** link and a blue arrow pointing to it.
- FANS:** Annual Energy Used: 6.31 MMBtu; Annual Energy Cost: \$122.10. Includes a **Show / Edit** link.
- ELECTRIC ARC FURNACE:** Furnace Type: Electric Arc Furnace (EAF); Baseline Data: Annual Energy Use: 375,802,931 kWh; Annual Energy Costs: \$24,802,993; Modification Data: Number of Modifications: 3; Max Energy Savings: 20,985,174 kWh; Max Cost Savings: \$1,385,022.
- PUSHER FURNACE:** Furnace Type: Pusher Furnace; Baseline Data: Annual Energy Use: 74,450 MMBtu; Annual Energy Costs: \$297,056; Modification Data: Number of Modifications: 4; Max Energy Savings: 31,415 MMBtu; Max Cost Savings: \$125,348.

- Starting here will also allow you to
 - make Pre-assessment screenings for the folder
 - put your assessments in folders

Other Important Features



Welcome to the most efficient way to manage and optimize your plant's systems and equipment.

Create an assessment to model your system and find opportunities for efficiency or run calculations from one of our many property and equipment calculators. Get started with one of the following options.

Quick Access to Assessments

Calculators such as:
Unit Converter
PHAST O₂ Enrichment Calculator

Settings such as:
Defaults

What has
changed since the
last update

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- v0.3.0-beta ⓘ

Create Assessment

Model a system and explore multiple optimization scenarios.

Properties & Equipment Calculators

Generate detailed properties and test a variety of adjustments.

- Motors
- Pumps
- Fans
- Process Heating
- Steam
- Compressed Air
- General

[View All Your Assessments](#)

Some things to note about the Process Heating Assessment

New Assessment
Fuel-fired

System Setup | Assessment | Diagram | Report | Sankey | Calculators | Back To Home

1 Assessment Settings | 2 Heat Balance | 3 Aux Equipment | 4 Design Energy Use | 5 Metered Energy

NEW ASSESSMENT SETTINGS

Language: English
Currency: \$ - US Dollar
Units of Measure: Imperial Metric
Energy Result Unit: Kilowatt-hours (kWh)
Select Energy Source Type: Fuel-fired Electrotechnology Steam-based

EQUIPMENT NOTES

Add additional information for your equipment

OPERATING CONDITIONS AT TIME OF ASSESSMENT

Add note for operating conditions

HELP

System Basics

Your system basics help define the units of measure and other information related to the system you are modeling for this assessment. These settings are inherited by default from your directory or applications settings and can be customized for this assessment.

Note: the words furnace, process heating equipment, process heating system, PH System, may be used interchangeably throughout this tool.

- This is where you choose what type of process heating equipment you are modeling.
- You cannot change the “Energy Source Type” after you move on to “Heat Balance”
- You can also add notes about the process heating equipment

Some things to note

The screenshot shows the 'New Assessment' interface for a 'Fuel-fired' system. The top navigation bar includes 'System Setup', 'Assessment', 'Diagram', 'Report', 'Sankey', and 'Calculators'. Below this is a progress bar with five steps: 1. Assessment Settings (active), 2. Heat Balance, 3. Aux Equipment, 4. Design Energy Use, and 5. Metered Energy. The main content area is divided into 'NEW ASSESSMENT SETTINGS' and 'HELP'.

NEW ASSESSMENT SETTINGS

- Language: English
- Currency: \$ - US Dollar
- Units of Measure: Imperial (selected), Metric
- Energy Result Unit: Kilowatt-hours (kWh)
- Select Energy Source Type: Fuel-fired (selected), Electrotechnology, Steam-based

EQUIPMENT NOTES

Add additional information for this equipment

OPERATING CONDITIONS

Add note for operating conditions

HELP

System Basics

Your system basics help define the units of measure and other information related to the system you are modeling for this assessment. These settings are inherited from the software directory or applications settings and can be customized for this assessment.

Note: the words furnace, process heating equipment, process heating System, may be used interchangeably throughout this tool.

Next

Callout Boxes:

- Top Right:** You can quickly access calculators at any point! (Arrow points to the 'Calculators' menu item)
- Middle Right:** This lets you view a Sankey Diagram of your modeled system (Arrow points to the 'Sankey' menu item)
- Bottom Middle:** This lets you view a diagram of a generic equipment to help explain the different types of losses (Arrow points to the 'Diagram' menu item)
- Bottom Left:** Once your baseline is complete, you can move on to Assessments to create different scenarios for the same furnace to compare energy savings opportunities! (Arrow points to the 'Assessment' menu item)

Some things to note

- After finishing your baseline, the other sections (Assessment, Report, etc.) of the tool can be accessed
- You can also begin an “Assessment” where you create “Modifications” for energy savings opportunities
- Once you create a modification, you **cannot** add or remove any losses from your baseline (you can change the values)
- Explore Opportunities allows you to change values relating to several common opportunities
- Modify All Conditions allows you to change any value
 - Here you can make multiple Modifications that you can name individually
 - You can change values in multiple loss calculators

Some things to note

Energy Loss/Use	Baseline MMBtu/hr	Individual Opportunity 4 - Reduce O2 level in flue gases MMBtu/hr
Charge Materials	143.56	143.56
Fixtures, trays etc.	---	---
Wall Losses	7.47	7.47
Cooling Losses	24.16	24.16
Atmosphere Losses	---	---
Opening Losses	2.81	2.81
Leakage Losses	3.26	3.26
Extended Surface Losses	---	---
Other Losses	---	---
Total Net Heat Required	181.27	181.27
Available Heat (%)	59.2%	64.0%
Flue Gas Losses	124.82	102.11
Exothermic Heat from Process	---	---
Gross Heat Input	306.09	283.38

Click here to View all Scenarios or Add a new one!

Parameter	Baseline	Individual Opportunity 4
Available Heat	59.2 %	64.0 %
Gross Heat	306.091 MMBtu/hr	283.378 MMBtu/hr
Flue Gas Losses	124.822 MMBtu/hr	102.110 MMBtu/hr

- Two ways to modify a Scenario
 - Explore Opportunities (Novice View)
 - Allows you to only change key energy savings opportunities related fields
 - Modify All Conditions (Expert View)
 - Allows you access to all fields that were used in the baseline for modifying

Some things to note

Select Scenario

Name	Modifications
Individual Opportunity 4 - Reduce O2 level in flue gases	Flue
Individual Opportunity 3 - Repair wall insulation	Wall
Individual Opportunity 2 - Repair fixed openings	Open
Individual Opportunity 1 - Preheat Charge Material	ChMat
All Opportunities	ChMat Flue GasL Open Wall

Add a new scenario. Your data will be copied directly from your baseline. Please use a unique name.

New Scenario Name

Add New Scenario

Back Next View Report

Navigate to a created Scenario

Click here to rename, copy or delete a Scenario

Badges to show you what pages have been modified

Name and Create New Scenarios

Some things to note

- Badges show you more information about your assessment at a glance

The screenshot shows the 'Reheat Furnace Case Study' software interface. The top navigation bar includes 'System Setup', 'Assessment', 'Diagram', 'Report', 'Sankey', and 'Calculators'. Below this, there are tabs for 'Explore Opportunities' (Novice View) and 'Modify All Conditions' (Expert View). The 'Selected Scenario' is 'Individual Opportunity 4 - Reduce O2 level in flue gases'. The main assessment area shows a list of components with badges: Operations (green), Charge Materials (green with 1), Flue Gas (blue with 1), Fixture (grey), Wall (orange with 1), Cooling (red with 1), Atmosphere (grey), Opening (green with 2), Leakage (green with 1), Extended Surface (grey), and Other (grey). Below the interface, six colored boxes with arrows pointing to the corresponding badges provide explanations: a green box for Operations ('Everything is okay & the same as the baseline'), a blue box for Flue Gas ('Everything is okay but different from the baseline'), an orange box for Wall ('An error has occurred'), a red box for Cooling ('A field is blank'), a green box for Opening ('There are two losses'), and a green box for Leakage ('There is only one loss').

Some things to note

Reheat Furnace Case Study
Fuel-fired

System Setup **Assessment** Diagram Report Sankey Calculators [Back To Home](#)

Explore Opportunities **Modify All Conditions**
Novice View Expert View

Individual Opportunity 4 - Reduce O2 level in flue gases
Selected Scenario [View / Add Scenarios](#)

Operations **Charge Materials** Flue Gas Fixture Wall Cooling Atmosphere Opening Leakage Extended Surface Other

BASELINE

Material #1
Select Type: Solid

Name of Material: Carbon Steel

Average specific heat of the solid material: 0.16 Btu/(lb-°F)

Latent Heat of Fusion: 60 Btu/lb

Specific heat of liquid from molten material: 0.175 Btu/(lb-°F)

Melting Point: 2800 °F

Charge (wet)-Feed Rate: 400000 lb/hr

Initial Temperature: 60 °F

Charge Material Discharge Temperature: 2300 °F

Water Content as Charged: 0 %

Water Content as Discharged: 0 %

Water Vapor Discharge Temperature: 0 °F

Charge Melted: 0 %

Charge Reacted: 1 %

Heat of Reaction: 50 Btu/lb

Endothermic/Exothermic: Endothermic

Additional Heat Required: 0 Btu/hr

Material #1 Heat Required: 143.360 MMBtu/hr
Material #1 Reaction Heat: 0.200000 MMBtu/hr
Material #1 Total Heat Required: 143.560 MMBtu/hr

All Materials Heat Required: 143.360 MMBtu/hr
All Materials Reaction Heat: 0.200000 MMBtu/hr
All Materials Total Heat Required: 143.560 MMBtu/hr

INDIVIDUAL OPPORTUNITY 4 - REDUCE O2 LEVEL IN FLUE GASES

Material #1
Select Type: Solid

Name of Material: Carbon Steel

Average specific heat of the solid material: 0.16 Btu/(lb-°F)

Latent Heat of Fusion: 60 Btu/lb

Specific heat of liquid from molten material: 0.175 Btu/(lb-°F)

Melting Point: 2800 °F

Charge (wet)-Feed Rate: 400000 lb/hr

Initial Temperature: 60 °F

Charge Material Discharge Temperature: 2300 °F

Water Content as Charged: 0 %

Water Content as Discharged: 0 %

Water Vapor Discharge Temperature: 0 °F

Charge Melted: 0 %

Charge Reacted: 1 %

Heat of Reaction: 50 Btu/lb

Endothermic/Exothermic: Endothermic

Additional Heat Required: 0 Btu/hr

Material #1 Heat Required: 143.360 MMBtu/hr
Material #1 Reaction Heat: 0.200000 MMBtu/hr
Material #1 Total Heat Required: 143.560 MMBtu/hr

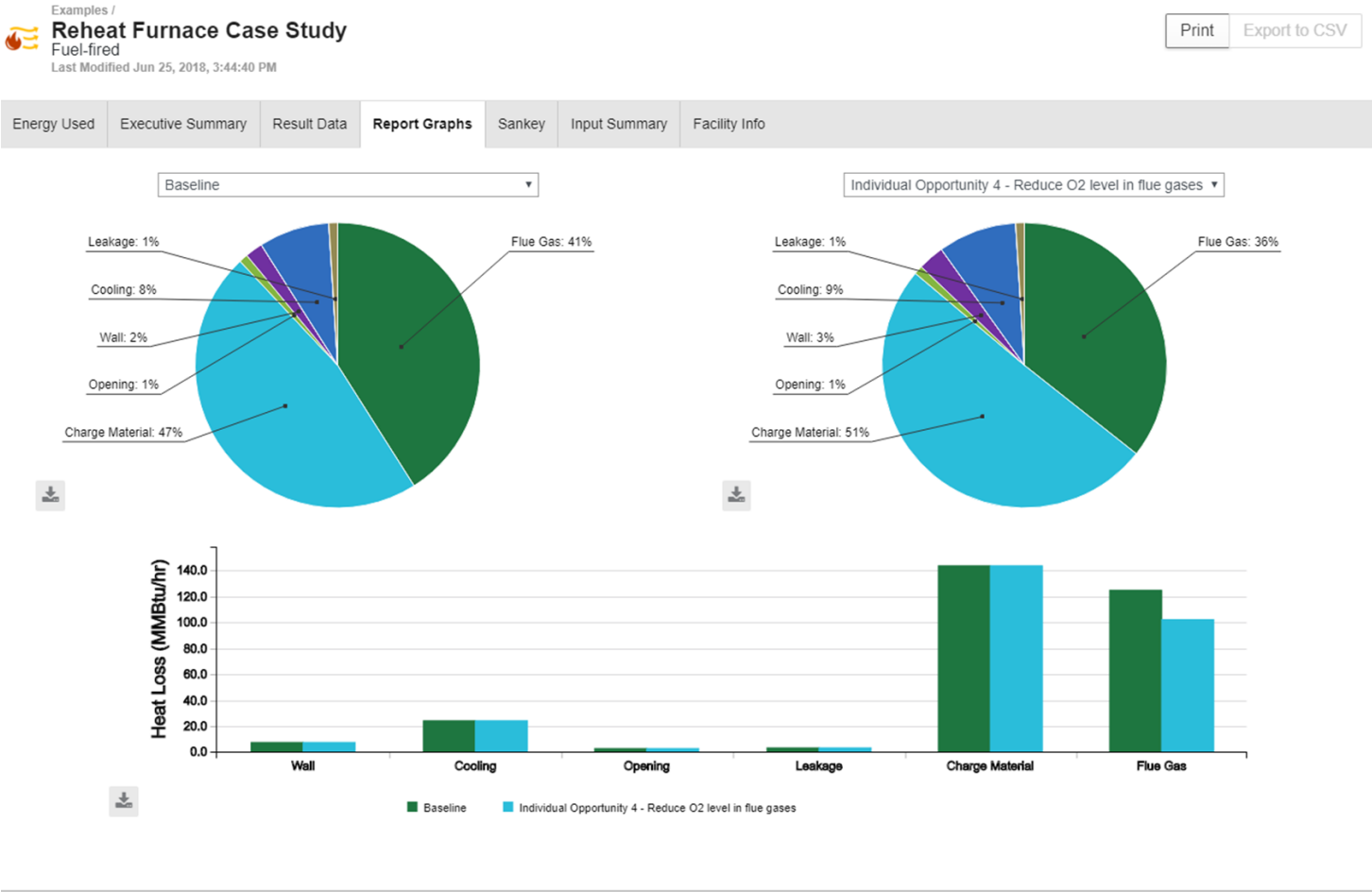
All Materials Heat Required: 143.360 MMBtu/hr
All Materials Reaction Heat: 0.200000 MMBtu/hr
All Materials Total Heat Required: 143.560 MMBtu/hr

RESULTS HELP **NOTES**

Add note for charge material

- When in “Assessment” mode, you can add notes in the right panel that will show up in the report to help you identify what you are modeling in this modification

Report



- The Report Tab allows you to access the equipment level report
- There are several tabs with high level and loss level results, graphs, Sankey Diagrams, etc.
- Each graph has an icon to download a .png of the graph
- Clicking Print will let you choose what sections of the report you which to print (or save to .pdf)

Facility Report

- To generate a facility report, return to “All Assessments”
- Check the folder of the facility you wish to generate a report for
- Click “Generate Report”
- This will generate a page with all the equipment you selected
 - You can mix process heating and pumps
- If you made multiple Modifications, choose which modification you wish to be represented in the roll up
- Click “View More Details to access the rollup

Facility Report

- To generate a facility report, return to “All Assessments”
- Check the folder of the facility you wish to generate a report for
- Or the individual assessments you want in the report
- Click “Generate Report”

U.S. DEPARTMENT OF ENERGY
Energy Efficiency & Renewable Energy

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EXTRA CASE STUDIES

- Electric Arc Furnace
- Pusher Furnace
- Reheat Furnace
- Coal Dryer
- HVAC Fan
- Cooling Pump 1

Last updated Aug 14, 2018

Facility Report

Efficiency Report

Pumps	Furnaces	Fans	Motors
Maximum Annual Cost Savings \$111,138 Annual Cost \$262,476	Maximum Annual Energy Savings 1,919 MWh Annual Energy 4,590 MWh	Maximum Annual Cost Savings \$3,495,361 Annual Cost \$32,183,192	Maximum Annual Energy Savings 500,018 MMBtu Annual Energy 2,972,421 MMBtu
Maximum Annual Cost Savings \$124,291 Annual Cost \$815,282	Maximum Annual Energy Savings 2,072 MWh Annual Energy 13,588 MWh		

Units Print Export to CSV Close Report

Can customize the units used in the report

Access a rollup report

- Cooling Pump 1
- Cooling Pump 2
- Process Pump 1
- Electric Arc Furnace
- Pusher Furnace
- Reheat Furnace
- Coal Dryer
- HVAC Fan

Extra case studies /
Electric Arc Furnace
Electric Arc Furnace (EAF)
Last Modified Aug 15, 2018, 12:28:59 PM

Energy Used **Executive Summary** Result Data Report Graphs Sankey Input Summary Facility Info

	Baseline	Reduce Slag	Preheat Steel	Cooling
Percent Savings (%)	--	2%	6%	
Energy Intensity (kWh/lb)	0.28656	0.28201	0.27056	
Annual Energy Used (kWh/yr)	375,800,000	369,840,000	354,820,000	
Annual Energy Savings (kWh/yr)	--	5,961,100	20,985,000	
Annual Cost	\$24,802,993	\$24,409,559	\$23,417,972	
Annual Cost Savings	--	\$393,435	\$1,385,022	
Implementation Costs	--	--	--	
Simple Payback Period (months)	--	--	--	
Use for Summary	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

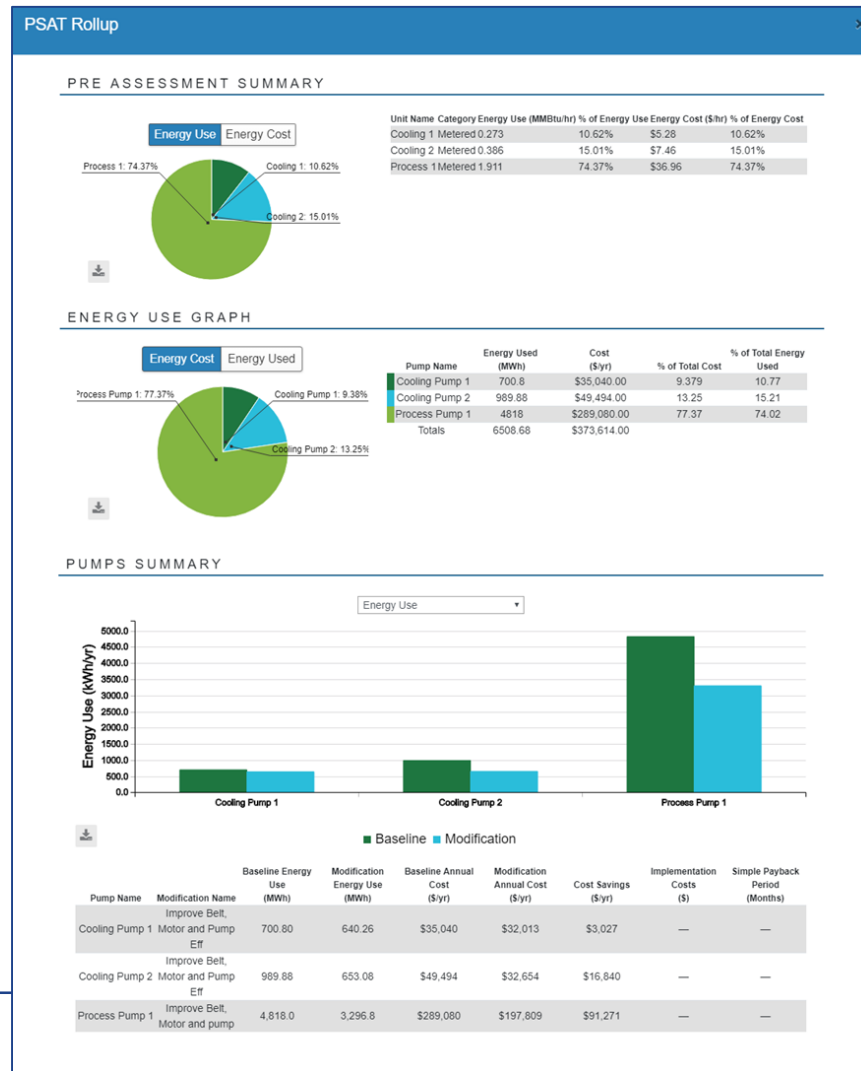
If you made multiple Modifications, choose which modification you wish to be represented in the roll up

Can view any Modification Notes you made

Modification Notes
Preheat Steel — Charge Materials: Preheat steel using flue gas exhaust

Facility Report – Roll up

- Click “View More Details to access the rollup



Pre-Assessment

MEASUR Calculated Energy Use/Cost

Summary with Chosen Modifications

All Assessments Dashboard



Energy Efficiency & Renewable Energy

Add Assessment

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 - Cooling Pump 2
 - Process Pump 1

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/ All Assessments

Select all folder content

ALL ASSESSMENTS INFO

No Facility Info found for this directory.

ALL ASSESSMENTS SUMMARY

Type	Assessments	Annual Energy Used	Annual Energy Cost
Pumps	0	0.00000 kWh	\$0.00
Process Heating	0	0.00000 MMBtu	\$0.00
Fans	0	0.00000 kWh	\$0.00
Total	0	0.00000 MMBtu	\$0.00

ALL ASSESSMENTS PRE-ASSESSMENT

No Pre-Assessment found for this facility.

EXAMPLES

- Reheat Furnace Case Study
- Example Pump
- Fan Example

Last updated Aug 13, 2018

EXTRA CASE STUDIES

- Electric Arc Furnace
- Pusher Furnace
- Reheat Furnace
- Coal Dryer
- HVAC Fan
- Cooling Pump 1

Pop up to rename or move files

Edit Extra case studies Properties

Edit Folder Name

Extra case studies

Change Folder Location

All Assessments/



All Assessments Dashboard



Add Assessment

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EXTRA CASE STUDIES INFO

Company	ORNL	Facility	ORNL	Date	8/14/2018
---------	------	----------	------	------	-----------

[View Details](#) [Edit Info](#)

EXTRA CASE STUDIES SUMMARY

Type	Assessments	Annual Energy Used	Annual Energy Cost
Pumps	3	6,508.68 kWh	\$373,614.00
Process Heating	3	3,472,440 MMBtu	\$35,678,552.74
Fans	2	15,659.6 kWh	\$939,573.03
Total	8	3,472,510 MMBtu	\$36,991,739.76

EXTRA CASE STUDIES SETTINGS

Units of Measure	Imperial
Fuel Cost	\$3.99 /MMBtu
Steam Cost	\$4.69 /MMBtu
Electricity Cost	\$0.07 /kWh

[Edit Settings](#)

FURNACES

Number of Furnaces	3
Annual Energy Used	548.54 MMBtu
Annual Energy Cost	\$4,336.47

[Show / Edit](#)

FANS

Number of Fans	2
Annual Energy Used	6.31 MMBtu
Annual Energy Cost	\$122.10

[Show / Edit](#)

PUMPS

Number of Pumps	3
Annual Energy Used	2.57 MMBtu
Annual Energy Cost	\$49.70

[Show / Edit](#)

ELECTRIC ARC FURNACE

Furnace Type:	Electric Arc Furnace (EAF)
Baseline Data:	
Annual Energy Use:	375,802,931 kWh
Annual Energy Costs:	\$24,802,993
Modification Data:	
Number of Modifications:	3
Max Energy Savings:	20,985,174 kWh
Max Cost Savings:	\$1,385,022

- The dashboard also allows you to
 - Add Facility info to a folder
 - View more Facility info
 - Facility info in subfolders will inherit from the parent folder, but can be edited
 - View Folder Summary and Costs/Units Settings

Exporting: Sending & Backing up Data

- The export function can be used for both
 - Sending your assessments to colleagues
 - Backing up your files in a safe place
- Click on “All Assessments” or “View your Assessments”
- Choose the Assessments you wish to export
 - Click the check box in the upper left corner of the card
 - Can choose individually or by folder
- Click the “Export” button
- Click “Export” in the popup

Exporting: Sending & Backing up Data



Add Assessment

Home

All Assessments

- Examples
 - Reheat Furnace Case Study
 - Example Pump
 - Fan Example
- Extra case studies
 - Electric Arc Furnace
 - Pusher Furnace
 - Reheat Furnace
 - Coal Dryer
 - HVAC Fan
 - Cooling Pump 1
 - Cooling Pump 2
 - Process Pump 1

- All Calculators
- Motors
- Pumps
- Fans
- Process Heating
- Steam
- Compressed Air
- General

/ All Assessments

Add Assessment Add Pre-Assessment Add Folder Generate Report Delete Export Select all folder content

ALL ASSESSMENTS INFO

Add Facility Info

No Facility Info found for this directory.

ALL ASSESSMENTS SUMMARY

Type	Assessments	Annual Energy Used	Annual Energy Cost
Pumps	0	0.00000 kWh	\$0.00
Process Heating	0	0.00000 MMBtu	\$0.00
Fans	0	0.00000 kWh	\$0.00
Total	0	0.00000 MMBtu	\$0.00

ALL ASSESSMENTS SETTINGS

Units of Measure	Imperial
Fuel Cost	\$3.99 /MMBtu
Steam Cost	\$4.69 /MMBtu
Electricity Cost	\$0.07 /kWh

Edit Settings

ALL ASSESSMENTS PRE-ASSESSMENT

Add Pre-Assessment / Screening

No Pre-Assessment found for this facility.

EXAMPLES

- Reheat Furnace Case Study
- Example Pump
- Fan Example

EXTRA CASE STUDIES

- Electric Arc Furnace
- Pusher Furnace
- Reheat Furnace
- Coal Dryer
- HVAC Fan
- Cooling Pump 1

Last updated Aug 13, 2018

Data to be exported

Directories

- Extra case studies
 - Electric Arc Furnace
 - Pusher Furnace
 - Reheat Furnace
 - Coal Dryer
 - HVAC Fan
 - Cooling Pump 1
 - Cooling Pump 2
 - Process Pump 1

Cancel Name your file: Case Studies Export Export as .json

Choose the Assessments you wish to export

Click the check box in the upper left corner of the card

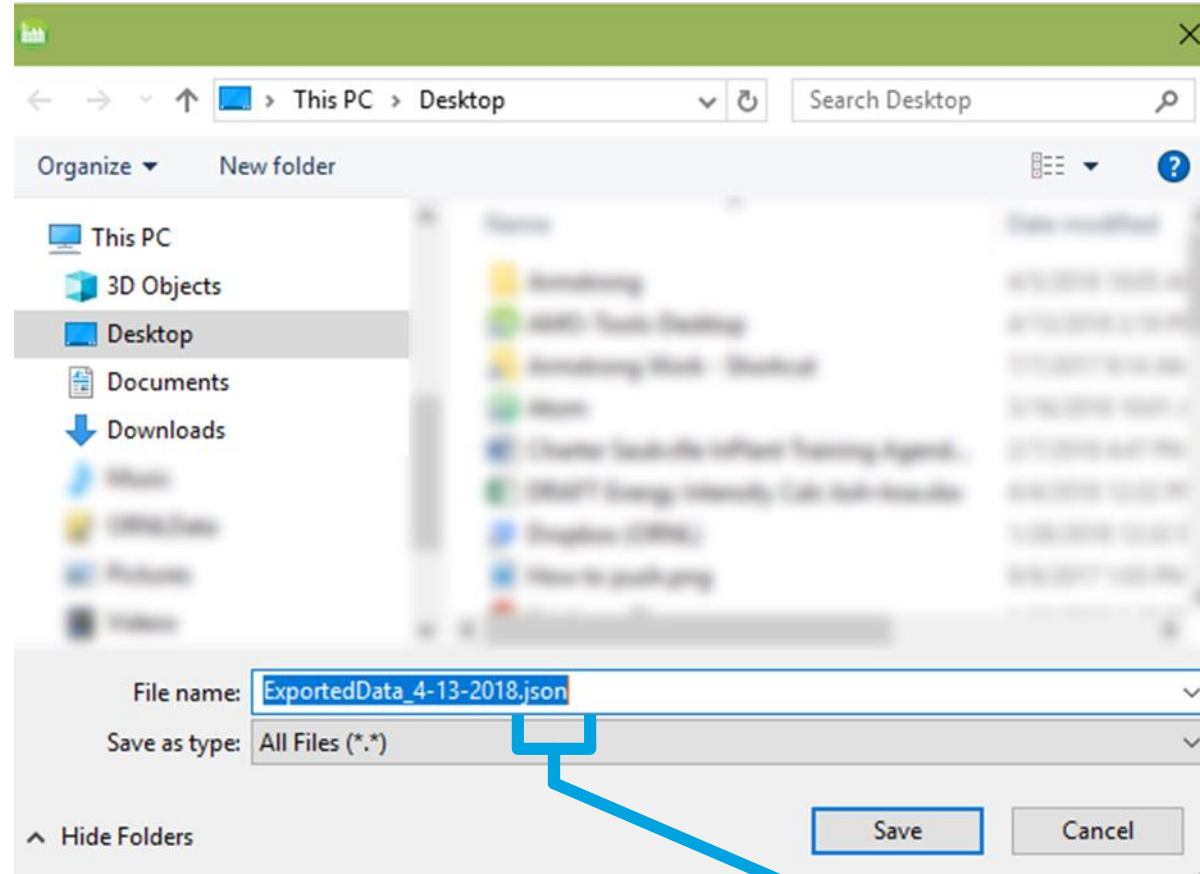
Can choose individually or by folder

Click the "Export" button

Choose your file name (or leave blank for default name)

Click "Export as .json"

Exporting: Sending & Backing up Data



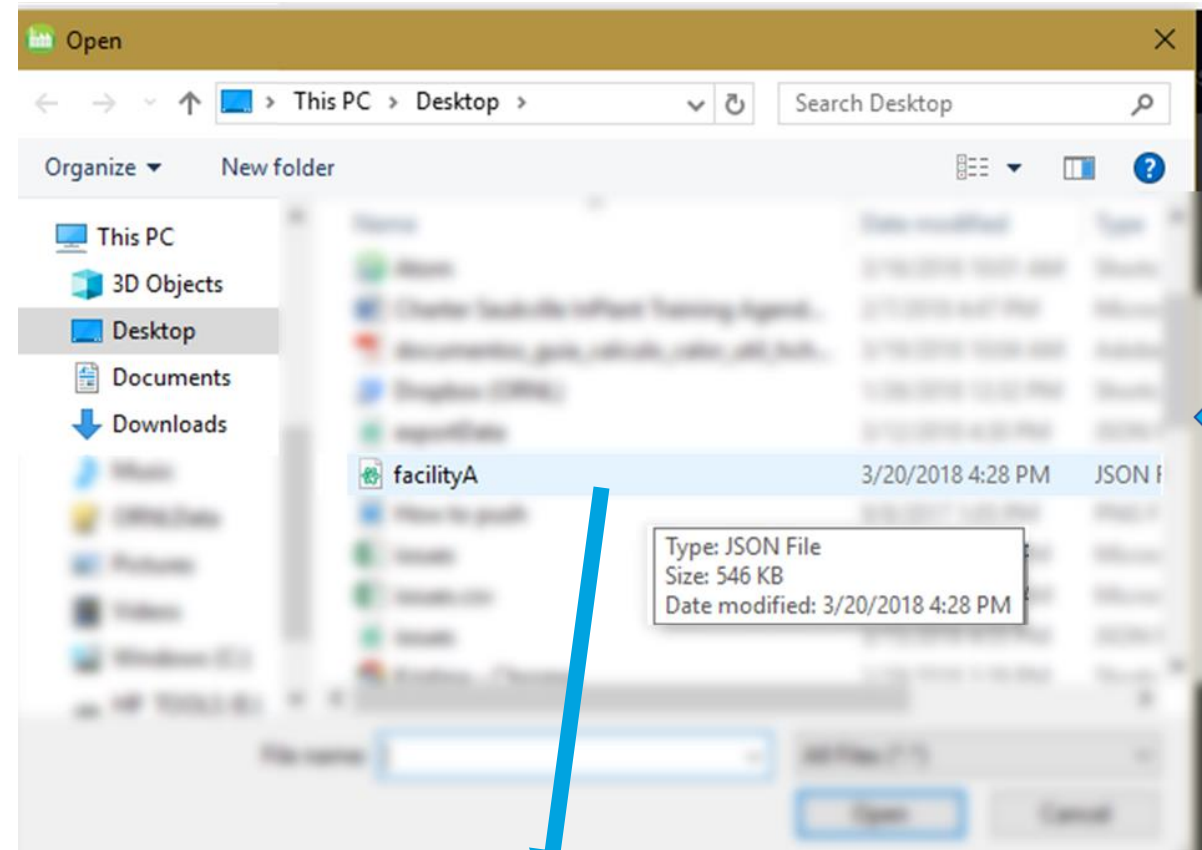
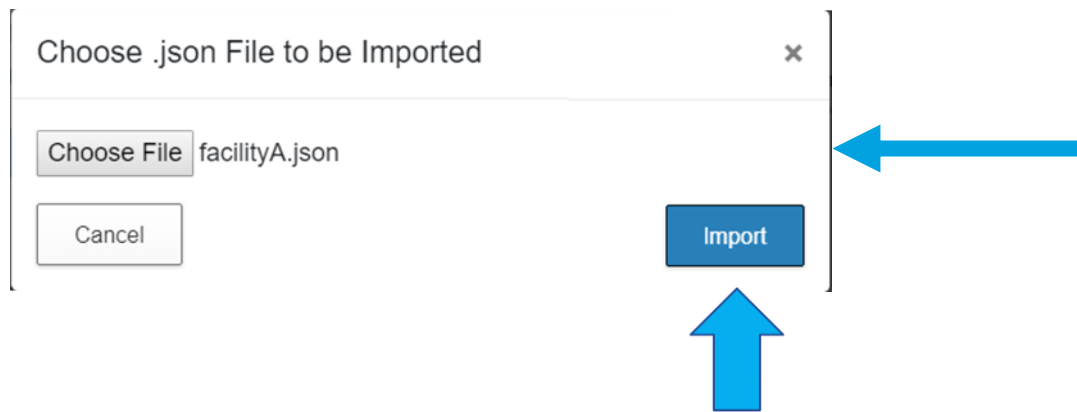
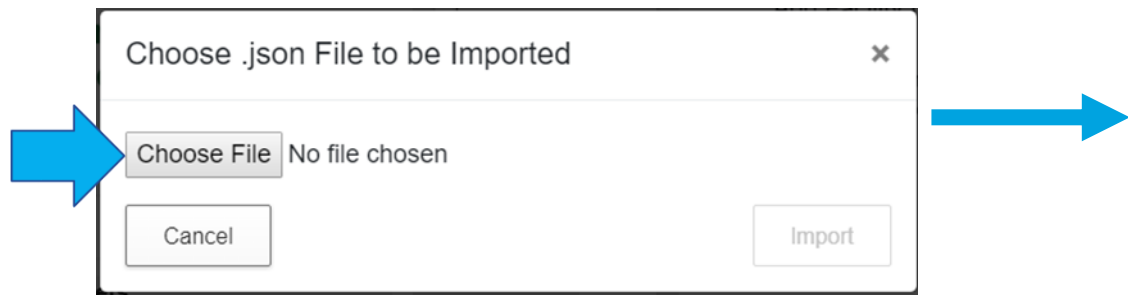
If you rename the file here, be sure to keep the **.json** at the end

Exporting: Sending & Backing up Data

- The import function will add .json files as assessments
- Click on “All Assessments” or “View your Assessments”
- Click “Import” link, then click “Choose File”
- Choose the .json files you wish to import
- Click the “Import” button
- The files should appear in your “All Assessments” folder
- If you get an invalid file type error, rename the file to have .json at the end

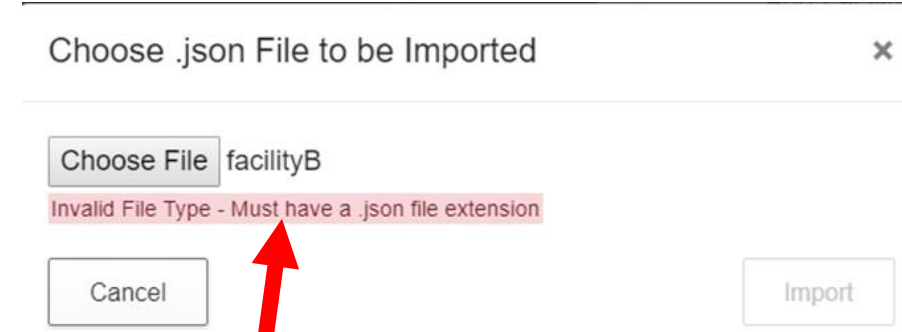
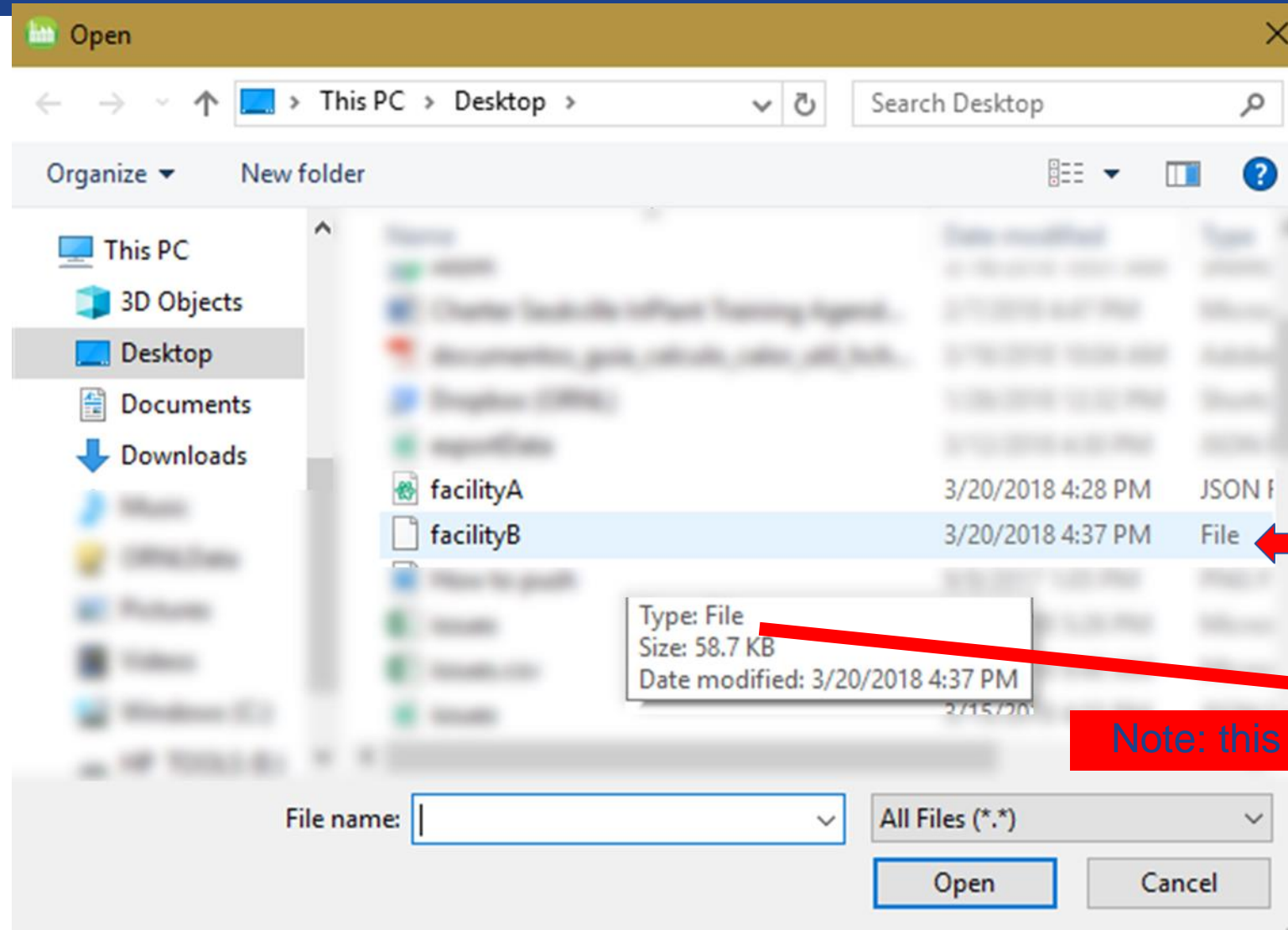
Importing: Sending & Backing up Data

Click “Import” link, then click “Choose File”
Choose the .json files you wish to import
Click the “Import” button



Note: if you hover over the file you wish to import it should say Type: JSON File

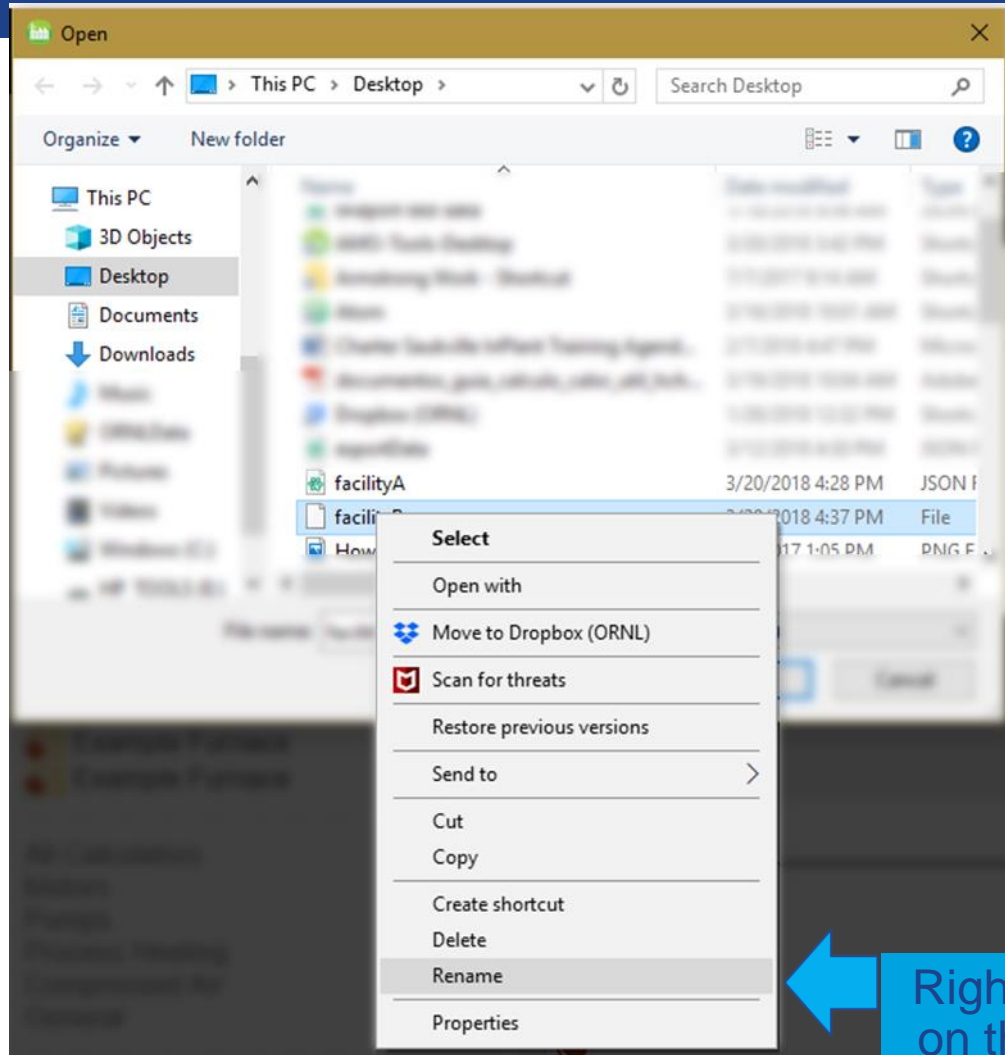
Importing: Invalid File Type Error



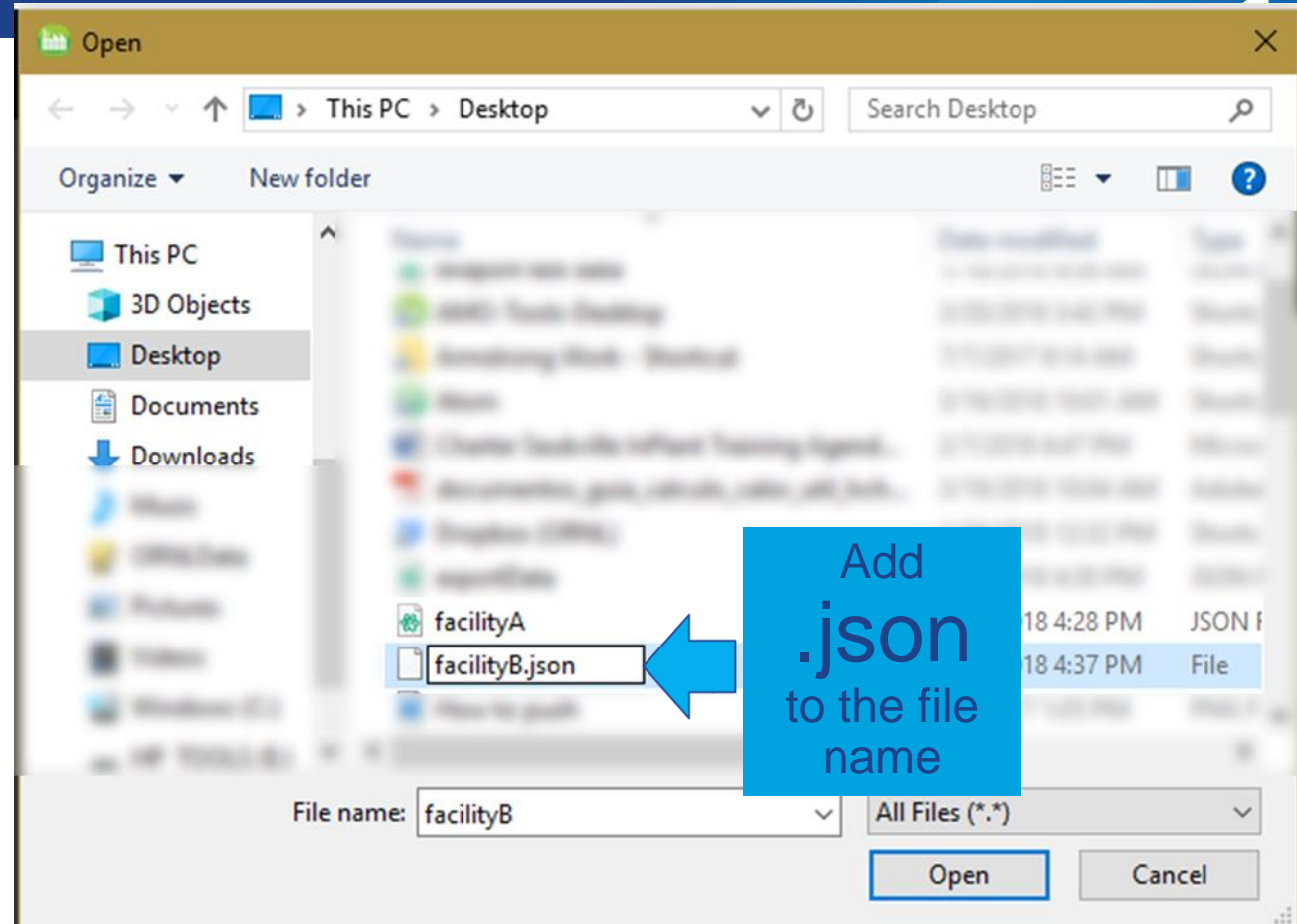
If you get an "Invalid File Type" Error...

Note: this is not a .json file

Importing: Invalid File Type Error



Right click on the file and select "Rename"



Add
.json
to the file
name