

Energy Efficiency & Renewable Energy



**SEED** PLATFORM<sup>TM</sup> 2.12 Analysis Features Created October 2021

### **Analysis Features in SEED**

- There are currently four different types of analysis in SEED
  - BSyncr
    - Makes a Building Sync file from the property data in SEED to be used with the NMEC (Normalized Metered Energy Consumption) program
    - Algorithms are based on methods in this Github repository <u>https://github.com/kW-Labs/nmecr</u>
  - BETTER
    - Runs a BETTER analysis from the property data in SEED
  - EUI
    - Calculates the EUI of a property based on the meter data and the gross floor area
  - Average Annual CO2
    - Calculates the CO2 emissions of a property based on the meter data and the eGRID region (which is based on the location of the property)

### **Generating an Analysis**

#### **Property List**

• In the Property List, select the properties you want to perform an analysis on

Cyc	ycle: 2020 Calendar Year 🗸			lar Ye	ar 🗸					
١	/iew b	oy Pro	perty		Viev	v by Tax Lot				
0	~				ø	PM Property ID ~	Property Name ~	Address Line 1	City 🔺	~
									los	×
	~			0		93755566	Preston-Church	0516 Amy Plains Apt. 177	East Los Angeles	
	~			0		274180	Chapman, Jordan and Adams	790 Crystal Mission Suite 168	Los Angeles	
	~			0		66378228	Cline Inc	108 Phillip Hollow	Los Angeles	
	~			0		73006138	Gardner LLC	52618 James Green Suite 761	Los Angeles	
	~			0		98594283	Meyer-Franco	0401 Middleton Ridge Suite 784	Los Banos	

• Select Run Analysis from the Actions menu choice

Actions 🗸	
Merge Selected	
Delete Selected	
Export Selected	
Add/Remove Labels	
Data Quality Check	
Email	
Run Analysis	

#### Generating an Analysis (cont'd)

#### **Property List**

• Add an Analysis Name and select the Analysis Type

un Analysis	
Name	
My Analysis	
Туре	
BSyncr	
BETTER	
EUI	
Average Annual CO2	

• Depending on the analysis type, there will be various other parameters to set (see the pages for each Analysis Type below for details)

#### Generating an Analysis (cont'd)

#### **Property List**

- Start the analysis
- Go to Analysis to see the results

III ANALYSES

Analyses										
ANALYSIS NAME (USER DEFINED)	ACTIONS	NUMBER OF PROPERTIES	TYPE	CONFIGURATION	RUN STATUS	RUN DATE				
BSyncr - Los Angeles	Ē	4	BSyncr	<ul> <li>model_type = Simple Linear Regression</li> </ul>	Completed	10-14-2021 18:31				
CO2 - All records	â	110	CO2		Completed	10-14-2021 18:30				
EUI - All records	Ô	110	EUI		Completed	10-14-2021 18:29				
BETTER Analysis - Los Angeles	Los Angeles 4		<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>preprocess_meters = false</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>		Completed	10-14-2021 18:23				
BETTER - All records	đ	110	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>preprocess_meters = false</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>	Completed	10-14-2021 18:16				

# **BETTER: Setting up the Analysis**

#### **Obtain a BETTER API key**

- Set up an account on the BETTER website: <u>https://better.lbl.gov/</u>
- Go to My Profile and click the Contact Us button to receive an API token

App <b>9</b> rdmitch My Profile	Click the My P	rofile option									
Sign Out	My Profile : The profile inform										
	User account informa	ation:									
	Username	milkweedmonarchs									
	Email	milkweedmonarchs@gmail.com	Update E-Mail								
	Password	*****	Change Password								
	API Token	Please contact us for BETTER API access.	Contact Us								

Click the Contact Us button to get an API for token to use in SEED to do a BETTER analysis

# **BETTER: Setting up the Analysis**

#### **Enter the BETTER API key in SEED**

• Go to Organizations / Settings and enter the BETTER Analysis API key

	Settings Sharing Column Settings Column Mappi
3 Settings	
Options	Organization Name
Units	LBNL 101
Default Display Fields	MapQuest API Key
Email	
Maintenance	Enable Geocoding
	Enable ComStock Functionality
nter the BETTER PI token here	
	BETTER Analysis API Key
	Please refer to the BETTER documentation to learn how to get an API key. Note, do not prefix the token with "Token ", only include the token

# **BETTER: Setting up the Analysis**

#### **Property List**

- In the Property List, select the properties you want to perform an analysis on
- Select Run Analysis from the Actions menu choice
- Add an Analysis Name and set Type = BETTER

**Conservative:** The savings goal will be one standard deviation worse than the median performance of the benchmarking peer group

**Nominal:** The savings goal will be equal to the median performance of the benchmarking peer group

**Aggressive:** The savings goal will be one half standard deviation better than the median performance of the benchmarking peer group

> CONSERVATIVE NOMINAL AGGRESSIVE

**R<sup>2</sup>** is a value from 0-1 that represents the proportion of the variance in the dependent variable (energy use) that is predictable from the independent variable (outdoor air temperature)

R	un Analysis		Default: BETTER will benchmark your			
2	Name		building(s) against built-in benchmark statistics derived from a sample of U.S.			
	RETTER Analysis - Los Angeles		buildings that match your property types.			
:	Type		Generate: BETTER will generate benchmark statistics based on the set of buildings being			
	BETTER		analyzed, so your buildings will be compared against others in your portfolio.			
2	BETTER Analysis Inputs (Under active develop	ment) Benchmark Data 🚯	This option will provide more accurate statistics if you select at least 30 buildings for analysis			
	CONSERVATIVE ~	DEFAULT	DEFAULT     GENERATE			
	Minimum Model R Squared 🚯	Run Portfolio Analys	is <b>O</b>			
	0.6	On sel	nly available if more than one property is lected for analysis from the inventory list.			
	Create Analysis Click Create Are to start the analysis	alysis Ch rec	eck this box to run all the selected cords as a group			

# **BETTER: Running the Analysis**

- Click the "Create Analysis" button to start the analysis
- Go to the Analyses page to see the status of the analysis



# **BETTER: Running the Analysis**

#### **Analyses page**

• The run status shows the progress of the analyses

Analyses										
ANALYSIS NAME (USER DEFINED)	ACTIONS	NUMBER OF PROPERTIES	TYPE	CONFIGURATION	RUN STATUS	RUN DATE				
BETTER Analysis - Los Angeles	<b>•</b>	5	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>	€ Creating					
		Anal	yses							
ANALYSIS NAME (USER DEFINED)	ACTIONS	NUMBER OF PROPERTIES	ТҮРЕ	CONFIGURATION	RUN STATUS	RUN DATE				
BETTER Analysis - Los Angeles	■ 🛱	5	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>	2 Running	10-04-2021 14:29				

Analyses										
ANALYSIS NAME (USER DEFINED)	ACTIONS	NUMBER OF PROPERTIES	ТҮРЕ	CONFIGURATION	RUN STATUS	RUN DATE				
BETTER Analysis - Los Angeles	Ē	5	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>	Completed	10-04-2021 14:29				

Analyses										
ANALYSIS NAME (USER DEFINED)	ACTIONS	NUMBER OF PROPERTIES	ТҮРЕ	CONFIGURATION	RUN STATUS	RUN DATE				
BETTER Analysis - Los Angeles	Ē	5	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>	Completed	10-04-2021 14:29				

#### Click on the Analysis Name link to view each analysis in the Portfolio

Analysis: BETTER Analysis - Los Angeles								
NUMBER OF RUNA	ТҮРЕ	TYPE CONFIGURATION		RUN STATUS	LATEST MESSAGE	RUN DATE	RUN DURATION	RUN AUTHOR
5	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>		Completed		10-04-2021 14:31	23 seconds	LBNL 405, Robin
RUN ID	PROPERTY		LATEST MESSAGES				OUTPUT FILES	
2570	790 Crystal	790 Crystal Mission Suite 168 🕞		ble change-point model o	Portfolio Report	t 🕹 , Building Report 📥		
2571	108 Phillip Hollow 🕞						Portfolio Report	t 🕹 , Building Report 📥
2572	52618 James Green Suite 761 🗲		No reasonal	ble change-point model o	could be found for this build	ding's electricity consumption.	Portfolio Report	t 🕹 , Building Report 📥
2573	0516 Amy Plains Apt. 177 🕞						Portfolio Report	t 🕹 , Building Report 📥
2574	0401 Middle	eton Ridge Suite 784 🗗					Portfolio Report	t 🕹 , Building Report 📥

Analyses		Anal	lysis: BETTER An	alysis - Los A	Angeles			
NUMBER OF RUNS	TYPE	CONFIGURATION		RUN STATUS	LATEST MESSAGE	RUN DATE	RUN DURATION	RUN AUTHOR
5	BETTER	<ul> <li>benchmark_dat</li> <li>savings_target</li> <li>portfolio_analy</li> <li>min_model_r_s</li> </ul>	a = DEFAULT = CONSERVATIVE sis = true quared = 0.6	Completed		10-04-2021 14:31	23 seconds	LBNL 405, Robin
RUN ID	PROPERTY		LATEST MESSAGES		OUTPUT FILES			
2570	790 Crystal	Mission Suite 168 🕒	No reasonable	change-point model c	Portfolio Report 초 , Building Report 📩			
2571	108 Phillip Hollow 🕞						Portfolio Report	🕹 , Building Report 📥
2572	52618 Jame	s Green Suite 761 🕒	No reasonable	change-point model c	Portfolio Report 초 , Building Report 📩			
2573	0516 Amy P	lains Apt. 177 🕒					Portfolio Report	🕹 , Building Report 📥
2574	0401 Middleton Ridge Suite 784 🔂		1				Portfolio Report	🕹 , Building Report 📥
Click Run ID to see the details for that building	Click th to see t Invento Detail	e Property link the results in ory Property	If there are is the analysis, be displayed	ssues with they will here		Click the Portfolio link to download the entire Portfoli Report	Click t link to o just th this bu	he Building download he report for uilding

Analysis: BETTER Analysis - Los Angeles		BETTER An	alysis - Los Angeles -	Run #2571		
NUMBER OF RUNS	ТҮРЕ	CONFIGURATION	RUN STATUS	LATEST MESSAGE	RUN DATE	RUN DURATION
<sup>5</sup> Click Run ID to see the BETTER report	BETTER	<ul> <li>benchmark_data = DEFAULT</li> <li>savings_target = CONSERVATIVE</li> <li>portfolio_analysis = true</li> <li>min_model_r_squared = 0.6</li> </ul>	Completed		10-04-2021 14:31	23 seconds
RUN ID	PROPERTY		LATEST MESSAGES	OUTP	UT FILES	
2571	108 Phillip H	ollow 💽		Portfo	lio Report 📥 , Building Report 📥	0
Portfolic	Report			Building F	leport	
SEED Analysis BETTH Gener Overview	R Analysis - L ated at 2021-10-0	os Angeles (224) <sup>14</sup>	Overview Building Ty	Generated	at oss Floor Area (ft <sup>2</sup> ):	
Number of Buildings 5 Potential Cost Savings:	Total Gr <b>928,41</b> Potentia	ross Floor Area (ft <sup>2</sup> ): <b>3.7</b> al Energy Savings:	Office Building Lo Los Angele	Scation: Clo es, California Sta Do	4,406.6 sest Weather Station: ntion: 722874-93134 : wntown L.A./Usc Campus	
\$823,435 63.8% Electricity Energy/Cost Savin	43,371 78.2%	,310 kBTU uel Energy/Cost Savings:	Potential C <b>\$392,192</b> 53.7%	ost Savings: Pot 11 60	ential Energy Savings: 911,574 kBTU .0%	
56.1% GHG Emissions Reduction	92.5% GHG En	nissions Intensity	Electricity E 51.9%	inergy/Cost Savings: Fos 84	sil Fuel Energy/Cost Savings: .1%	
(MTCQ <sub>2</sub> e): 2,465.7 76.2%	Reducti 14.5	on (kgCO <sub>2</sub> e/ft <sup>2</sup> )	GHG Emiss (MTCO <sub>2</sub> e): <b>733.9</b> <b>58.8 %</b>	ions Reduction GH Rec 2.4	G Emissions Intensity luction (kgCO <sub>2</sub> e/ft <sup>2</sup> )	





1	/iew t	by Pro	perty		Viev	v by Tax Lot			5 properties
0					ø	PM Property I.x	Address Line 1 ~	BETTER Potential Electricity Energy Savings (kWh) 🗠	BETTER Potential Fuel Energy Savings (kWh)
		Ь		0		93755566	0516 Amy Plains Apt. 177	1080492.8	1555523.96
		ъ	9	0		274180	790 Crystal Mission Suite	records that didn't have	2892695.79
				0		66378228	108 Phillip Hollow	2250062.69 electric meter data	1240875.19
				0		73006138	52618 James Green Suite		3313195.03
		K		0		98594283	0401 Middleton Ridge Sui.	265737.99	112293.06

There are several BETTER fields that are available to view in the Inventory Property List View

			~	4	BETTER Recommendation: Increase Heating System Efficiency
~		BETTER Potential Cost Savings (USD)		- 2	BETTER Recommendation: Reduce Equipment Schedules
~		BETTER Potential Energy Savings (kWh)			DETTED Decommendation: Reduce Lighting Load
~		BETTER Potential GHG Emissions Reduction (kgCO2e)	~	- 1	BETTER Recommendation. Reduce Lighting Load
~		BETTER Min Model R^2	~	3	BETTER Recommendation: Reduce Plug Loads
•			~	-7	BETTER Recommendation: Upgrade Windows
~		BETTER Recommendation: Add/Fix Economizers	~	- 7-	BETTER Analysis Id
~		BETTER Recommendation: Add Wall/Ceiling Insulation		-	BETTER Potential Electricity Cost Savings (USD)
~		BETTER Recommendation: Check Fossil Baseload		-	
~		BETTER Recommendation: Decrease Heating Setpoints	~	199	BETTER Potential Fuel Cost Savings (USD)
			~	+	BETTER Potential Electricity Energy Savings (kWh)
~		BEITER Recommendation: Decrease Inflitration	~		BETTER Potential Fuel Energy Savings (kWh)
~		BETTER Recommendation: Decrease Ventilation	~	-	BETTER Potential Electricity GHG Emissions Reduction (kgCO2e)
~		BETTER Recommendation: Eliminate Electric Heating			RETTER Reportion Fuel CLIC Emissions Reduction (IncO2a)
		BETTER Recommendation: Increase Cooling Setpoints	~	120	BETTER Potential Fuel GHG Emissions Reduction (kgc02e)
•			~	4	BETTER Valid Electricity Model
~	. *	BETTER Recommendation: Increase Cooling System Efficiency	-	- 7.	BETTER Valid Fuel Model

### **BSyncr: Setting up the Analysis**

- In the Property List, select the properties you want to perform an analysis on
- Select Run Analysis from the Actions menu choice
- Add an Analysis Name and set Type = BSyncr

Name		
BSyncr - Los Angeles		
Туре		
BSyncr	~	
BSyncr Model Selection		
Simple Linear Regression	~	Three Parameter Linear Model Coolin
63		Three Parameter Linear Model Heatin Four Parameter Linear Model

# **BSyncr: Running the Analysis**

- Click the "Create Analysis" button to start the analysis
- Go to the Analyses page to see the status of the analysis



# **BSyncr: Viewing the Analysis Results**

ANALYSIS NAME (USER DEFINED)	ACTIO	ONS NUMBER OF PROPERTIES	TYPE	CONFIG	URATION		RUN STATUS	RUN DATE
BSyncr - Los Angeles	â	5	BSyncr	•	model_type = Simp	le Linear Regression	Completed	10-05-2021 15: <mark>0</mark> 3
I Click on the <b>Analysis Name</b> view each analysis in the Por	link to rtfolio							
< Analyses		Analysis: BSyn	cr - Los A	ngeles				
NUMBER OF RUNS	TYPE CONF	FIGURATION	RU	N STATUS	LATEST MESSAGE	RUN DATE	RUN DURATION	N RUN AUTHOR
5	BSyncr	<ul> <li>model_type = Simple Linear Regression</li> </ul>	n Cor	npleted		10-05-2021 15:03	48 seconds	LBNL 405, Robin
RUN ID	PROPERTY			LATES	T MESSAGES	OUTPUT	FILES	
2590	790 Crystal Missio	on Suite 168 💽				Building	Sync 📩 , PNG 📩	
2591	108 Phillip Hollow	w <b>C+</b>				Building	Sync 📥 , PNG 📥	
2592	52618 James Gree	en Suite 761 💽				Building	Sync 📥 , PNG 📥	
2593	0516 Amy Plains A	Apt. 177 💽				Building	Sync 📥 , PNG 📥	
2594	0401 Middleton R	lidge Suite 784 💽				Building	Sync 📥 , PNG 📥	
Click <b>Run ID</b> to see the details for that building	Click the see the re <b>Property</b>	<b>Property</b> link to esults in <b>Inventory</b> <b>Detail</b>	If the the a be di	re are is nalysis, splayed	ssues with they will here	Click the BuildingSync download the	link to li file c	Click the <b>PNG</b> ink to lownload the plot graphic

# **BSyncr: Viewing the Analysis Results**



- In the Property List, select the properties you want to perform an analysis on
- Select Run Analysis from the Actions menu choice
- Add an Analysis Name and set Type = EUI

Name	
EU[ - Los Angeles	
Туре	
EUI	

- Click the "Create Analysis" button to start the analysis
- Go to the Analyses page to see the status of the analysis



# **EUI: Viewing the Analysis Results**

ANALYSIS NAME (USER DEFINED)		ACTIONS	NUMBER OF	PROPERTIES	TYPE	CONFIGURATION		RUN STATUS	RUN DATE
EUI - Los Angeles		<u>ل</u>	5	6	EUI			Completed	10-05-2021 15:36
Click on the <b>Analysis Name</b> link to view each analysis in the Portfolio									
< Analyses			An	alysis: EUI	- Los Ang	jeles			
NUMBER OF RUNS	ТҮРЕ	CONFIGURAT	ION RU	N STATUS	LATEST MESS/	IGE	RUN DATE	RUN DURATION	RUN AUTHOR
5	EUI		Cor	npleted	Some propertie	es failed to validate.	10-05-2021 15:36	0 seconds	LBNL 405, Robin
RUN ID	PROPERT	γ		LATEST MESS	AGES				OUTPUT FILES
2595	790 Cryst	al Mission Suite	168 💽	Prope	erty view skippe	d (no linked electricity met	ters with 12 months of consecu	tive readings).	
2596	108 Philli	p Hollow 💽							
2597	52618 Jar	mes Green Suite	761 💽						
2598	0516 Amy	/ Plains Apt. 177	C•						
2599	0401 Mid	dleton Ridge Sui	te 784 💽	Prope	erty view s <mark>kipp</mark> e	d (no linked electricity met	ters with 12 months of consecu	tive readings).	
Click <b>Run ID</b> to see the details for that building	Click see <b>Prop</b>	/ the Prop the results perty Deta	<b>erty</b> link to in <b>Invent</b> o <b>il</b>	ory	If ther the ar be dis	re are issues with halysis, they will played here	1		

### **EUI: Viewing the Analysis Results**

Analysis: EUI - Los Ar	ngeles			EUI - Los Ang	geles - Run #2596			
UMBER OF RUNS		ТҮРЕ	CONFIGURATION	RUN STATUS	LATEST MESSAGE	RUN DATE	RUN DURATION	RUN AUTHOR
	1	EUI		Completed	Some properties failed to val	lidate. 10-05-2021 15:36	0 seconds	LBNL 405, Robir
IN ID	1	PROPERT	гү		LATEST MESSAGE	ES	OUTPUT FILES	
96		108 Phill	lip Hollow 🕞					
Results		Cli Inv	ick this link to vi ventory Propert	ew the result y Detail	s in the			
"EUI": 48.648, "Gross Floor Ar "Total Yearly M } Results	rea": 304407, Meter Reading": 14808	3798.9	83		Property Detail			
	Property : 108 Phi	illip Ho	llow		🖋 Edit			
	Actions - Cycle: 2020 Calendar Year Labels: (no labels applied	1)				EUI - Los 48.	Angeles Run #2596 Co	mpleted 💼

#### **EUI: Property List - Viewing the Analysis Results**

							The field "Ar the Inventor	nalysis EUI" contains t y Property List View	he EUI results in		
-											
1	/iew t	y Pro	operty		Viev	w by Tax Lot					
0			-		ø	PM Property ID ~	Property Name 🛛 🗸 🗸	Address Line 1 V	Analysis EUI 🛛 🗸	Gross Floor Area (ft²) 🛛 🗠	City 🔺 🗸 🗸
											los x
			9	0		93755566	Preston-Church	0516 Amy Plains Apt. 1	64.0547	92,883.00	East Los Angeles
				0		274180	Chapman, Jordan and A	790 Crystal Mission Su	ĸ	256,507.00	Los Angeles
			9	0		66378228	Cline Inc	108 Phillip Hollow	48.648	304,407.00	Los Angeles
				0		73006138	Gardner LLC	52618 James Green Sui	67.454	260,829.00	Los Angeles
			9	0		98594283	Meyer-Franco	0401 Middleton Ridge		13,789.00	Los Banos

These are the two records that didn't have electric meter data so the EUI could not be calculated

#### Average Annual CO2: Setting up the Analysis

#### **Data Import**

- In the Property data being imported to SEED, for a CO2 analysis the following must be added
  - eGRID Subregion Code
    - Find the eGRID Subregion definitions here

#### https://www.epa.gov/egrid/summary-data



#### Average Annual CO2: Setting up the Analysis

- In the Property List, select the properties you want to perform an analysis on
- Select Run Analysis from the Actions menu choice
- Add an Analysis Name and set Type = Average Annual CO2

Name		
Average Annual CO2	? - Los Angeles	
Туре		
Average Annual CO	2	~
Create Analysis		

- Click the "Create Analysis" button to start the analysis
- Go to the Analyses page to see the status of the analysis



#### **Average Annual CO2: Viewing the Analysis Results**

			A	nalyse	S					
ANALYSIS NAME (USER DEFINED)	ACTIONS	NUMBER OF PROPERTIES	ТҮРЕ	CONFIG	URATION	0	CREATED	RUN STATUS	RUN DATE	
CO2 Analysis - Los Angeles	â	4	C02			3	10-20-2021 11:39	Completed	10-20-2021 1	
Click on the <b>Analysis Name</b> lin view each analysis in the Portf	k to olio									
< Analyses		Anal	ysis: CO	2 Anal	ysis - Los An	igeles				
NUMBER OF RUNS	ТҮРЕ	CONFIGURATION	CREATED		RUN STATUS	LATEST MESSAGE	RUN DATE	R	UN DURATION	
4	C02		10-20-202	1 11:39	Completed	10-20-20.		. 11:40 0	0 seconds	
RUN ID	PROPER	LATEST MESSAGES				OUTPUT FILES				
703	G									
704	G									
705	G									
706	G									
Click Run ID to see the details that building Results {     "Annual Coverage %": 100,     "Average Annual CO2 (kgCO2e)":     "Total Annual Meter Reading (M     } }	for 368624, ₩h)": 1743.73	Click the <b>Propert</b> see the results in <b>Property Detail</b>	<b>y</b> link to <b>Invento</b>	ory	If the the a be di	ere are issues winalysis, they wi splayed here	ith ll			

#### Average Annual CO2: Viewing the Analysis Results



#### **Average Annual CO2: Property List - Viewing the Analysis Results**

