



# Commercial Climate Calculator

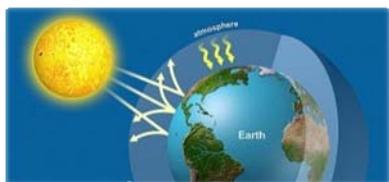
A New Calculator for California Businesses and Multi-Family Properties



City of Lawndale Public Works Department  
2013

# CalRecycle Commercial Climate Calculator

## Motivation & Goals



- **Greenhouse gases (GHG) are certain gases in the atmosphere (water vapor, carbon dioxide, nitrous oxide, and methane) that trap heat from the sun, warming the Earth's atmosphere.**
- **In 2004, 53.1 million metric tons of GHG were produced by commercial businesses, multi-family properties, and residents.**
- **Under Assembly Bill (AB 32), California's goal is to reduce the amount of GHG to 1990 levels.**



# CalRecycle Commercial Climate Calculator

## Benefits

- **CalRecycle provides an easy-to-use calculator to show benefits of waste reduction and diversion for businesses and multi-family complexes:**
  - Dollars saved
  - Tons of resources returned to the economy
  - Greenhouse gas emissions reduced
- **With the calculator, businesses and multi-family properties can:**
  - Better understand their trash and its impacts – including cost, volume, and environmental impact.
  - Estimate the results of reducing and recycling their trash.
  - Learn recycling opportunities for their business and/or multi-family property to save money.



# CalRecycle Commercial Climate Calculator

## Unique Features

- **User friendly calculator can be downloaded and saved in Microsoft Excel format**
- **Lawndale's current commercial and multi-family cart and bin rates are included in the calculator**
- **Any Lawndale business, institution, or multi-family property can use this free tool**



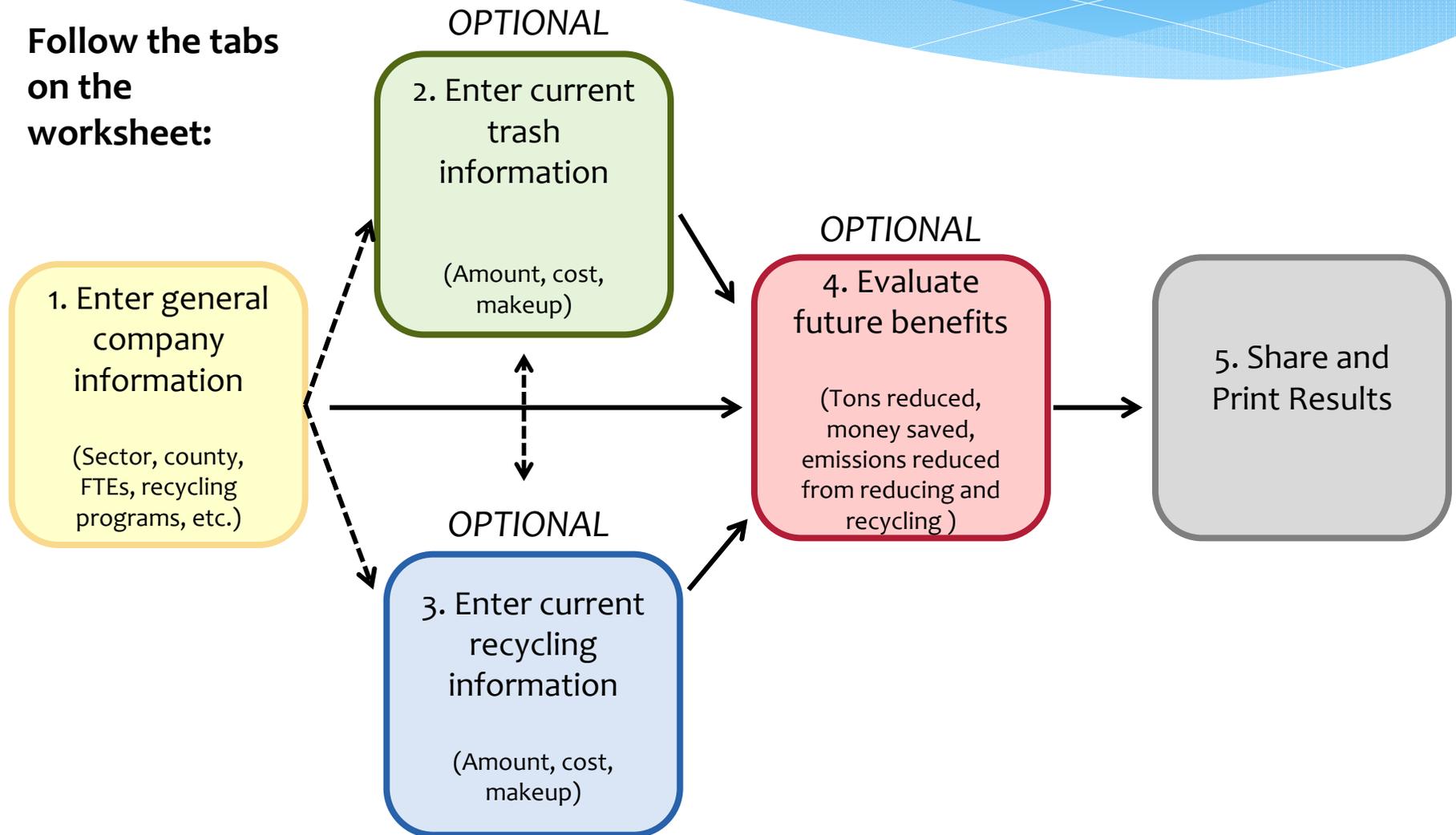
# CalRecycle Commercial Climate Calculator Requirements

- Download the Commercial Climate Calculator Excel file on the City of Lawndale Public Works Website at:  
[www.lawndalecity.org/html/depthtml/pw/RecyclingPW.html](http://www.lawndalecity.org/html/depthtml/pw/RecyclingPW.html)
- What You'll Need:
  - Computer with Microsoft Excel 
  - Your information – type of business, number of full-time employees, etc.
  - Trash & Recycling information is helpful, but not required



# How to Use the Commercial Climate Calculator

Follow the tabs  
on the  
worksheet:



# How to Use the Commercial Climate Calculator

## 1. Enter general company information

(Sector, county, FTEs, recycling programs, etc.)

Commercial Climate Calculator

### 1. General Business Information



Enter general business information in yellow cells (Step 1.1, required)

*Select business type, then fill in yellow cells below*

Business Name	Law Offices of Samuel Brown	Full-Time Employee equivalents	25
Business Sector	Services - Business Services		
	<a href="#">Don't know your business sector? Click here for Glossary (tab 7)</a>		
County	Los Angeles		

Select your current recycling programs (select one column) (Step 1.2, required)

<b>No Program</b>	<b>One or More Program(s) (select both boxes if applicable)</b>		
<input type="checkbox"/> Don't currently have recycling	<input checked="" type="checkbox"/> Have mixed recycling (all materials go in one bin)	Scroll down ↓	
	<input type="checkbox"/> Have separate material program(s) [check box and then select up to 6 materials below]		
	Select: [select material from list]		Select: [select material from list]
	Select: [select material from list]		Select: [select material from list]
	Select: [select material from list]	Select: [select material from list]	

# How to Use the Commercial Climate Calculator

## OPTIONAL

### 2. Enter current trash information

(Amount, cost, makeup)

Commercial Climate Calculator  
**2. Current Trash** 

Revise current landfilled trash information (if known) (Step 2.1, optional)

**What do you know about your trash amount?** (select one answer and enter annual data) (Step 2.1a.)

Don't have any specific information    
  **Have information on number of containers and pickups**    
  Have actual trash amount from bills

Annual tons (estimated)     
 Container size  cubic yards    
 Annual amount  (select unit)

Estimate using trash cost from bills  
 To use this option, enter actual cost in Step 2.1b (cell K25)    
 Estimate annual tons     
 # of containers     
 Fullness     
 # pickups per week     
 Shared dumpster?

Annual tons (est.)

*Tip: If you have containers of multiple sizes, enter information for the first container here, and then additional sizes below in the "Multiple Container" section*

**What do you know about the cost of your trash?** (select one answer and enter annual data) (Step 2.1b.)

**Don't have any specific information**    
  Have actual cost from trash bills

Annual cost (estimated)     
 Annual cost (actual)     
 Shared dumpster?

Container A     
 Annual cost (est.)

*Tip: If you have multiple containers, use this section for the cost of container A and the 'Multiple Container' section below for your other containers.*

*If your trash and recycling are billed together, contact your collection company to determine how best to split the costs for this analysis.*  
*If you know your local service rates and would like to enter these into the calculator for more accurate results, click here*

**Do you know what materials are in your trash?** (Step 2.1c.)

**No, use averages\***    
  Yes, change makeup\*

Cardboard	<input type="text" value="7%"/>	<input type="text"/>
Paper	<input type="text" value="20%"/>	<input type="text"/>
Mixed Metals	<input type="text" value="1%"/>	<input type="text"/>
Mixed Plastics	<input type="text" value="2%"/>	<input type="text"/>
Glass	<input type="text" value="3%"/>	<input type="text"/>
Food Scraps	<input type="text" value="7%"/>	<input type="text"/>
Yard Waste	<input type="text" value="6%"/>	<input type="text"/>
Wood (pallets, etc.)	<input type="text" value="3%"/>	<input type="text"/>
Other	<input type="text" value="52%"/>	<input type="text"/>
Total	100%	

*Tip: If you would like to change the makeup of your trash instead of using the average makeup for your business type on the left, please make sure the percentages you enter add up to 100%. Please choose below whether to evaluate this makeup by weight or by volume. What are these materials? Click here for definitions*

\*How would you like to review and change what materials are in your trash? (select)

Once you have checked your current annual trash quantity, cost, and makeup, you are finished with this page.

# How to Use the Commercial Climate Calculator

## OPTIONAL

### 3. Enter current recycling information

(Amount, cost, makeup)

Commercial Climate Calculator  
**3. Current Recycling**

Revise current recycling information (if known) (Step 3.1, optional)

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**What do you know about your recycling amount?** (select one answer and enter annual data) (Step 3.1a.)

Don't have any specific information    
  Have information on number of containers and pickups    
  Have actual recycling amount from bills

Annual tons (estimated)     
 Container type A  cubic yards    
 Annual amount  cubic yards  
 Select material:     
 Shared container?

Container size  units    
 Annual tons (estimated)

# of containers     
 # pickups per week

Fullness     
 Shared container?

Annual tons (est.)

Tip: If you have multiple containers of multiple sizes or with different materials, enter information for the first here, and then additional sizes below in the "Multiple Container" section

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**What do you know about the cost of your recycling?** (select one answer and enter annual data) (Step 3.1b.)

Don't have any specific information    
  Have actual cost from recycling bills

Container type A     
 Annual cost\* (estimated)     
 Annual cost (actual)\*     
 Shared container?

Tip: If you have multiple containers, use this section for the cost of container A and the "Multiple Container" section below for your other containers.

Annual cost for A (est.)\*

\*Note: Negative cost means revenue from selling recyclables

If your trash and recycling are billed together, contact your collection company to determine how to split the costs for this analysis.

If you know your local service rates and would like to enter these into the calculator for more accurate results, click here.

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**Do you know what materials are in all of your recycling?** (Step 3.1c.)

No, use averages    
  Yes, change makeup

Cardboard	39%	<input type="text"/>
Paper	60%	<input type="text"/>
Mixed Metals	0%	<input type="text"/>
Mixed Plastics	0%	<input type="text"/>
Glass	0%	<input type="text"/>
Food Scraps	0%	<input type="text"/>
Yard Waste	0%	<input type="text"/>
Wood (pallets)	1%	<input type="text"/>
Other	0%	<input type="text"/>
Total	100%	

Tip: If you would like to change the makeup of all of your recycling (all containers combined) instead of using the average makeup for your business type on the left. Please choose below whether to evaluate this makeup by weight or by volume.

What are these materials? [Click here for definitions](#)

\*How would you like to review and change what materials are in your recycling? (select)

Once you have checked your current annual recycling quantity, cost, and makeup, you are finished with this page.

# How to Use the Commercial Climate Calculator

## OPTIONAL

### 4. Evaluate future benefits

(Tons reduced, money saved, emissions reduced from reducing and recycling)

Commercial Climate Calculator **CalRecycle** 

### 4. Future Benefits of Recycling & Reduction

**Check out the benefits** (Step 4.1, required)

Use the table below to evaluate the benefits you can achieve by reducing the amount of material you send to the landfill. To use this table:

- Review** the "Current" section of the table, which is based on the information about your business, trash, and recycling that you have already entered.
- Enter** a new, higher recycling rate and/or enter the percent of your trash that you would like to reduce in the yellow action cells in the "Future Actions" section (refer to the Glossary and Guidelines pages for more information about these two types of actions).

The "Results" section and bar charts below the table summarize the trash, cost, and footprint savings<sup>1</sup> for you!

Evaluate Future Actions: Law Offices of Samuel Brown [Click here for guidelines about actions](#)

*Recycling and reduction are different; click here for definitions*

Materials	Current						Future Actions		Results		
	Annual Trash	Annual Recycling	Annual Total Material	Annual Recycling Rate	Total Cost Savings*	Carbon Footprint Reductions	Increase Recycling Rate to _%	Reduce _% of Total Material	Additional Trash Reduced	Additional Cost Savings*	Additional Footprint Reductions
	Tons	Tons	Tons	%	\$	MT CO <sub>2</sub> e	%	%	Tons	\$	MT CO <sub>2</sub> e
Cardboard	1.4	1.8	3.2	57%	\$16	9.1	75%	25%	0.8	\$264	4.79
Paper	4.1	2.8	6.9	40%	\$98	11.9	50%	25%	1.5	\$192	10.68
Mixed Metals	0.2	0.0	0.2	0%	\$0	0.0			0.0	\$0	0.00
Mixed Plastics	0.4	0.0	0.4	0%	\$0	0.0			0.0	\$0	0.00
Glass	0.5	0.0	0.5	0%	\$0	0.0			0.0	\$0	0.00
Food Scraps	1.4	0.0	1.4	0%	\$0	0.0			0.0	\$0	0.00
Yard Waste	1.3	0.0	1.3	0%	\$0	0.0			0.0	\$0	0.00
Wood (pallets, etc.)	0.5	0.0	0.6	8%	\$0	0.0		10%	0.1	\$6	0.00
Other	10.7	0.0	10.7	0%					0.0	\$0	0.00
<b>Total</b>	<b>20.5</b>	<b>4.6</b>	<b>25.2</b>	<b>18%</b>	<b>\$115</b>	<b>21.0</b>			<b>2.4</b>	<b>\$462</b>	<b>15.5</b>

Source reduction cost savings  Enter the amount of money that you will save each year by not purchasing as much material.

[If you know your local service rates and would like to enter these into the calculator for more accurate cost saving results, click here](#)

Scroll down ↓

# How to Use the Commercial Climate Calculator

## 5. Share and Print Results

Commercial Climate Calculator  
**Results for Law Offices of Samuel Brown** 

**Share your results**

This sheet provides a summary of the information you have provided so far. Email, save, or print this page to share the benefits of recycling and waste reduction.

**Current Trash and Recycling**

**21** tons is roughly the amount of trash your business currently throws away annually. **Right now, material goes to:**

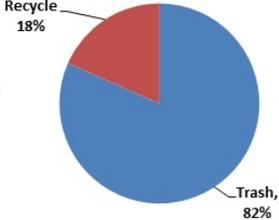
**\$2,091** is the estimated amount that you spend on disposing this trash each year.

**5** tons is about how much your business currently recycles and/or composts annually.

**\$641** is the estimated amount that this recycling and composting saves your business by avoiding disposal costs.

**\$356** is about how much money this recycling and/or composting costs per year.

**21** metric tons of CO<sub>2</sub>e is the amount of greenhouse gas emissions that this recycling avoids each year.



Category	Percentage
Recycle	18%
Trash	82%

**Future Trash and Recycling**

Using this calculator, you have evaluated the benefits of reducing your trash through:  
 reducing **3** tons of material and recycling and composting an additional **1** tons of material.



Scenario	Total Tons
Before	21
After	18

Scenario	Total Cost
Before	\$2,446
After	\$2,105

Scenario	Total MT CO <sub>2</sub> e Reduced
Before	-21
After	-36

By reducing your waste by **4** tons annually, your business will:

**avoid spend** **\$341** in trash disposal and material purchasing costs.  
**\$74** in recycling costs.  
**\$267** for a net savings of

**prevent** **15** MT CO<sub>2</sub>e, which is roughly equal to:

- 3** U.S. cars. 
- 2** U.S. homes over a year.
- 36** barrels of oil consumed. 
- 397** tree seedlings grown over 10 years. 

Annual tailpipe emissions from **3** U.S. cars.

Emissions from the electricity use of **2** U.S. homes over a year.

Emissions from **36** barrels of oil consumed.

The carbon dioxide captured by **397** tree seedlings grown over 10 years.

# CalRecycle Commercial Climate Calculator

## Contact Info

- For any questions, comments, or suggestions, please contact:

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