



The Sustainable Diner Cost-Benefit Monitoring Tool



Instruction Manual

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For more information, please contact:

World Wide Fund for Nature (WWF) Philippines
4th floor, JBD Plaza
65 Mindanao Avenue, Bagong Pag-asa
Quezon City 1105, Philippines
kkp@wwf.org.ph
www.wwf.org.ph

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Energy



Water



Waste



Sourcing



SCP Investments



Summarized Data



Calculator



FAQs



Scan to learn more.
bit.ly/SCPPProject

Introduction

Welcome!

Thank you for using WWF-Philippines' The Sustainable Diner Cost-Benefit Monitoring Tool (TSD-CB Monitoring Tool), co-developed with the Wallace Business Forum.

The overriding goal for adopting sustainable consumption and production (SCP) practices is to support sustainable development, which is the efficient and responsible use of resources (creating less pollution and waste) so they remain abundant for present and future generations in their pursuit for a better quality of life. However, adopting SCP practices can be daunting, especially for businesses looking to balance social responsibility with business viability.

One of the ways to help is through the use of technology as a tool to enable businesses to easily track and measure the benefits and costs of adopting specific SCP practices into their business operations. The TSD-CB Monitoring Tool is one such tool developed specifically for food service establishments in the Philippines. It was created using Microsoft Excel, a program already being widely used in many businesses, to cut down on upfront costs and assist in ease of integration of SCP practices monitoring into the regular workflow of restaurants.

The TSD-CB Monitoring Tool was designed based on the learnings from a Cost Benefit Analysis Study wherein it was confirmed that SCP practices in four (4) categories – Energy, Water, Waste Management, and Sourcing – are being applied or considered by restaurants in the Philippines. The TSD-CB Monitoring Tool is meant to aid these restaurants in their planning and decision-making by giving them an easy-to-use tool to track and analyze the costs and benefits of applying SCP practices.

This instruction manual was prepared to support the restaurants' use of the TSD-CB Monitoring Tool.

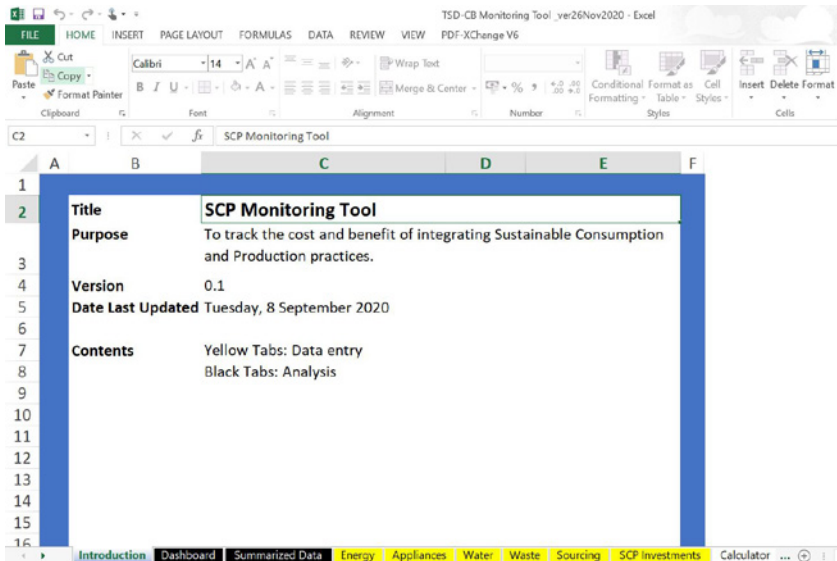
Let's Get Started!

Watch the instructional video at bit.ly/CBToolVideo or scan the QR code.



Download the TSD-CB Monitoring Tool at bit.ly/CBTool.

Read this manual or access the e-copy at bit.ly/CBToolManual.



Definition of Terms

Bokashi

A convenient and quick way of converting food waste into fertilizer using effective microbes and without needing oxygen.

Contract Farming

An agreement between restaurants and farms wherein restaurants provide farms with some of the inputs to grow specific produce and then sell the produce back to the restaurants at an agreed upon price.

Cost Benefit Analysis

Cost benefit analysis (CBA) is the determination of the benefits of implementing sustainability plans into day-to-day business operations of a fully functioning restaurant, weighed against their corresponding costs.

Cost Benefit Monitoring Tool

The technological intervention applied in aid of CBA and project sustainability. In this case, this is the utilization of an excel worksheet to efficiently track and monitor specific indicators meant to measure the costs and benefits of the application of SCP principles into business operations.

Cost of CO₂ Emissions

The measure of the economic and social harm of carbon emissions, expressed as the dollar value of the total damages from emitting one ton of carbon dioxide into the atmosphere. The current central estimate of the social cost of carbon is over \$50 per ton in today's dollars.

**Equipment
(a.k.a System Cost)**

Capital expenditure stemming from the implementation of an SCP practice.
Example – water filtering system.

Food Waste

This pertains to unused and unconsumed food. This consists of kitchen waste, either uncooked or spoiled raw food, and dining waste, the served meal not consumed by the customers or leftovers.

Import Replacement

The process of replacing the purchase of imported raw food ingredients from outside the local community or city where the restaurant is located, to a source within the restaurant’s city or province. The practice of reducing the travel distance of the raw food ingredient source to the kitchen.

**Labor
(a.k.a Manpower)**

All staff and management involved in the execution and monitoring of the SCP practice.

Local Sourcing

The sourcing, purchasing, or procurement of food, ingredients, and other consumable products from within a specific radius (distance) from where they will be used or sourced, or from a given geographical area.

Material expense

All consumable parts that must be regularly replaced or purchased to properly implement or execute the SCP practice. For example, filters for the water purification system.

Own Farm Production	Raw food ingredients sourced by the kitchen from own farms located within restaurant premises or within short-travel distance from farm to kitchen (no air travel).
Repurposed Food	Food waste that is recycled for another use – usually as fertilizer or animal feed.
SCP Investments	The cost of adopting and implementing an SCP practice. Includes labor cost, equipment, and material costs.

Acronyms

CBA	Cost Benefit Analysis
CO₂	Carbon Dioxide
KWH	Kilowatt per Hour
H₂O	Water
M³	Cubic Meters
PHP	Philippine Peso
SCP	Sustainable Consumption and Production
SQM	Square Meter
TSD-CB	The Sustainable Diner Cost-Benefit
USD	United States Dollar

Parts of the Monitoring Tool

The TSD-CB Monitoring Tool contains 11 tabs or sheets, namely:

1. Introduction
2. Dashboard
3. Summarized Data
4. Energy
5. Appliances
6. Water
7. Waste
8. Sourcing
9. SCP Investments
10. Calculator
11. Data Tables (for programmers)

Restaurants are expected to use tabs 1-10 of the TSD-CB Monitoring Tool. The 11th tab or worksheet, entitled Data Tables, is for programming or data analytics.

Color Codes

The TSD-CB Monitoring Tool contains tabs or sheets that have different colors to help users navigate more easily and guide them in determining the level of input needed from them for the given tab. The color legend is elaborated below.

Tabs and Sheets



Blue – Action needed. User first step.



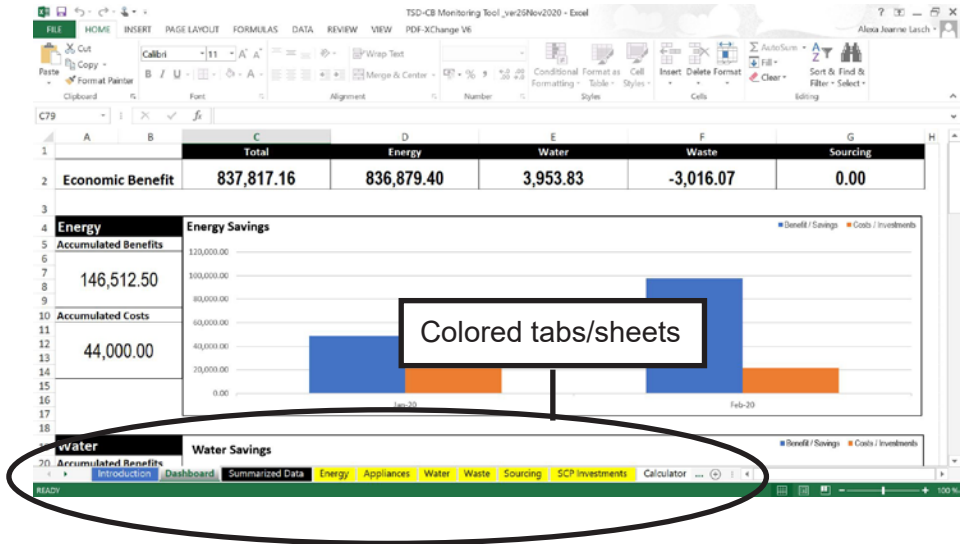
Yellow – Action needed. Users need to encode data in this section for the tool to function.



Black – Analytics. No action needed. These pages contain summarized insights based on data/information supplied in yellow colored tabs.



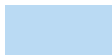
White – Support tool for users.



Cells



Yellow-orange – Action needed. Drop down selection.



Blue – Action needed. Enter number data.



Green – Action needed. Enter text data.

OTHER COSTS

Key: Select Option (Yellow-orange), Write Text (Green), Enter Number (Blue), Example Text (Green)

SCP Practice	Item	Cost PHP	Acquired Month/Year	Life Years	End of Life Month/Year
Energy Lighting		170,000.00	01/2020	10	01/2030

SCP Practice (Yellow-orange cells)

Position (Green cells)

Personnel Count	Monthly Rate PHP	Start Date Month/Year	End Date Month/Year

Personnel Count, Monthly Rate, Start Date, End Date (Blue cells)

Material Expenses: Dashboard, Summarized Data, Energy, Appliances, Water, Waste, Sourcing, SCP Investments, Calculator, Data Tables

Setting Up

Step one in using the TSD-CB Monitoring Tool is the **encoding of the SETUP DATA** found in the blue colored tab entitled, "Introduction".

Click button to hide/unhide
SETUP data and start encoding

Hide Setup Data	
Start Date*	01/04/2020
Social Cost of CO ₂ emission (USD/ton)	50
Gross Floor Area (SQM)*	750
Number of Staff / Employees	
Avg Daily Operating Hours	
Average USD Exchange Rate (PHP)*	51.00

Introduction Dashboard Summarized Data Energy Appliances Water Waste Sourcing SCP Investments Calculator

Introduction tab

The red asterisk (*) means that encoding a number in the blue cell is required. The other cells without asterisk are **optional**. The white cell with violet text called Social Cost of CO₂ emission is provided by the TSD-CB Monitoring Tool and is based on existing studies.

The Sustainable Consumption and Production (SCP) Practice Categories

The TSD-CB monitoring tool tracks data on **four (4) SCP practice categories – Energy, Water, Waste Management, and Sourcing**. Each category has a dedicated input sheet in the excel-based tool and users need to encode the relevant information to determine the cost and benefit of integrating that particular SCP practice into the business operations of their food service establishment.

Energy

The benefits of SCP practices in **Energy** is recorded and quantified in the monitoring tool by encoding relevant information in the two yellow-colored excel sheets marked “Energy” and “Appliances”.



Energy [Mandatory]

The Energy sheet/tab requires the encoding of the energy setup data consisting of **Electricity Consumption (a)**, and **Electricity Cost (b)**. Both of these are found in the monthly electric bill given by electricity distribution companies, such as MERALCO or VECO, etc.

How to input data on the Energy Tab:

1. Click on the **Energy** tab.
2. Encode **Electricity Consumption (a)** on the cell under the corresponding month.

ENERGY Setup and Monthly Data								
Key	Select Option Write T							
	Enter Number Example							
Show Setup Data								
Monthly Data	January	February	March	April	May	June	July	August
Electricity Consumption (Kw)	1,000.00	1,000.00						
Electricity Cost (PHP/KwH)	13.00	13.00						


3. Encode **Electricity Cost (b)** on the cell under the corresponding month.

Sample electricity bill that shows where (a) and (b) could be found:

Mr. JUAN DELA CRUZ
1007 MOUNTAIN DRIVE
Osmeña St. Novaliches
METRO MANILA

For registered classes contact our Call Center at 14001
or visit our website at www.meralco.com.ph

KALIDOKAN ALIX BUS CTN
156 SARGSON ROAD
CALOOCAN CITY
TEL NO. 425-3745
TIN: 400-151-528-500-VAT



MERALCO
Ang Energy ng Ina

ELECTRIC BILL Page 1 of 2

Account Summary for Account Number 123456789

Balance from Previous Billing		Current Charges		Total Amount
P 0.00	Thank you	P 5,346.30	02/16/2015	P 5,346.30

Service Info

Service ID Number: 45100020101
Rate: General Power
Contract in the name of: MRS PEGGY LIPOCO CUJ
Service Address: 189 MAC ARTHUR HWAY BLDG G54
POTRERO, MALABON
METRO MANILA

Billing Info

Bill Date: 07 Feb 2015
Meter Reading Date: 07 Feb 2015
Billing Period: 08 Jan 2015 to 07 Feb 2015
Due Date: 16 Feb 2015
Tariff #/VAT: 341
Total Current Amount: P 5,346.30
Next Meter Reading: 07 Mar 2015

What is the new FIT-All charge?

*Fit-all is a new addition to your bill, as mandated by the government. This is to promote the use of sustainable sources of energy and will go to renewable energy developers. Distribution utilities nationwide (like Meralco) collect it but do not earn from this charge.

*Read-in-Tariff Allowance

For more information, visit <http://www.kasaco.ph/feed-in-tariff>

Service Info

Service ID Number: 45100020101
Rate: General Power
Contract in the name of: MRS PEGGY LIPOCO CUJ
Service Address: 189 MAC ARTHUR HWAY BLDG G54
POTRERO, MALABON
METRO MANILA

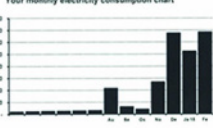
Billing Info

Bill Date: 07 Feb 2015
Meter Reading Date: 07 Feb 2015
Billing Period: 08 Jan 2015 to 07 Feb 2015
Due Date: 16 Feb 2015
Total kWhs: 341
Total Current Amount: P 5,346.30
Next Meter Reading: 07 Mar 2015

BREAKDOWN OF ELECTRICITY CHARGES

BILL SUBGROUP	SUBTOTAL	PERCENTAGE
Generation	17,759.73	33.21%
Transmission	438.15	8.20%
System Loss	181.23	3.38%
Distribution (Network)	2,215.61	41.44%
Subductors	48.72	0.91%
Governor's Fees	131.92	2.47%
FIT-All (Renewables)	11.84	0.22%
Universal Charges	120.13	2.25%
Other Charges	0.00	0.00%

Your monthly electricity consumption chart



Average Usage for 12 months
308 kWh/month

Please be informed that MERALCO may conduct a routine meter/transformer comparison of our customer metering facilities within your area this quarter.

For authorized collecting agents

ATM / Phone Reference No.	Meralco Reference No.	Total Amount Due
		P 5,346.30

Source: Meralco (<https://biz.meralco.com.ph/billings-and-payments/understanding-your-bill>)

Appliances

An important aspect of computing the benefits of energy-related SCP practices is the identification of the main appliances in a food service establishment that consumes the most energy. Based on research, four (4) types of electrical appliances in food service establishments commonly consume the most energy. These are air conditioners, freezers, chillers, and refrigerators.

How to input data on the Appliances Tab:

1. Click on the **Appliances** Tab.

Appliances Setup

If you cannot find the specific BRAND and MODEL

Key Select Option Write Text
Enter Number Example Text Add New Appliance

Appliance Type	No. of Units	Brand	
Air Conditioner	1	AKIRA	AC-S10CP (Indoor
Freezer / Chiller / Refrigerator	2	ELECTROLUX	EBB3400H-H

Insert new row



2. Fill out the **yellow-orange cells** by clicking on the drop down list to choose the appropriate information (Appliance Type, Brand, Model).

Appliance Type	No. of Units	Brand	Model
Air Conditioner			
Air Conditioner			
Freezer / Chiller / Refrigerator			

Insert new row

3. Fill out the **blue cells** by encoding the required information.

Appliance Type	No. of Units	Brand	Model	Unit Cost (R#)	Acquired Month	Useful Life (Years)	End of Life	Monthly Cost
Air Conditioner	1	AKIRA	AC 510CF (Inverter & Outdoor)	240,000.00	01/2020	10	01/2031	20,000.00
Freezer / Chiller / Refrigerator	2	ELECTROLUX	FRS18KH H	370,000.00	01/2020	10	01/2030	1,000.00

Blue cells need data input

Introduction Dashboard Summarized Data Energy Appliances Water Waste Sourcing SCP Investments Calculator

How to Add New Appliance if the Appliance Brand or Model is not found in the drop-down list:

1. Click on **Add New Appliance**.

Appliances Setup

Key Select Option Write Text
Enter Number Example Text

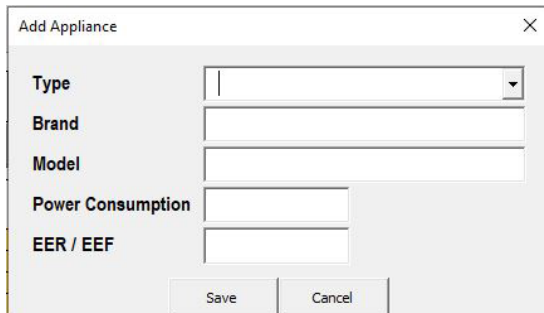
If you cannot find the specific BRAND and MODEL

Add New Appliance

Appliance Type	No. of Units	Brand
Air Conditioner	1	AKIRA
Freezer / Chiller / Refrigerator	2	ELECTROLUX

Insert new row

2. A dialog box will appear. Fill-out with the necessary information.



The image shows a software dialog box titled "Add Appliance". It features a close button (X) in the top right corner. The dialog contains the following fields:

- Type**: A dropdown menu.
- Brand**: A text input field.
- Model**: A text input field.
- Power Consumption**: A text input field.
- EER / EEF**: A text input field.

At the bottom of the dialog, there are two buttons: "Save" and "Cancel".

3. Click **Save**. Then proceed with filling out the monthly log.



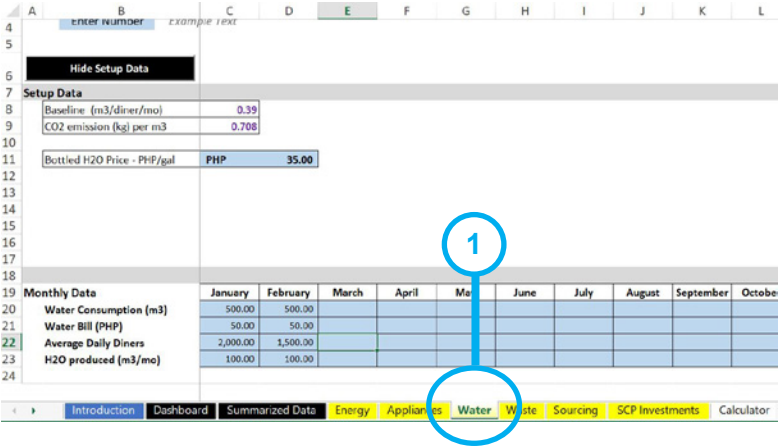
Water

The yellow colored sheet named “**Water**” monitors the benefits and cost of applying SCP practices when using water.

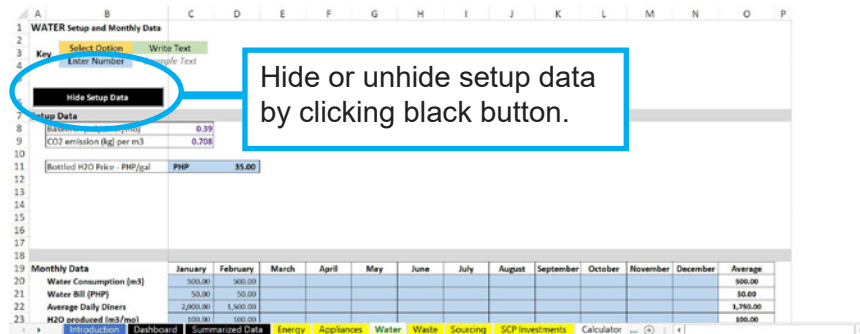
Water [Mandatory]

How to input data on the **Water** Tab:

1. Click on the **Water** Tab.



2. Encode **Setup Data**: Click Show Setup Data.



3. Encode the price of bottled water purchased in the blue box.

The purchase price of bottled water per gallon can be the average market purchase price per year, or the actual average purchase price per year based on accounting or financial records.

1	WATER Setup and Monthly Data	
2		
3	Key	Select Option Write Text
4		Enter Number Example Text
5		
6	Hide Setup Data	
7	Setup Data	
8	Baseline (m3/diner/mo)	0.39
9	CO2 emission (kg) per m3	0.708
10		
11	Bottled H2O Price - PHP/gal	PHP 35.00

How much do you pay for bottled water? Encode info here.

4. Enter monthly data in the corresponding blue boxes.

1	WATER Setup and Monthly Data													
2														
3	Key	Select Option	Write Text											
4		Enter Number	Example Text											
5														
6	Show Setup Data													
19	Monthly Data	January	February	March	April	May	June	July	August	September	October	November	December	Average
20	Water Consumption (m3)	500.00	500.00											500.00
21	Water Bill (PHP)	50.00	50.00											50.00
22	Average Daily Diners	2,000.00	1,500.00											1,750.00
23	H2O produced (m3/mo)	100.00	100.00											100.00
24														

Enter monthly water data here.

Where to find Water Consumption and Water Bill using monthly bill from water provider?

Here's a sample water bill from a water provider:

MANILA WATER
CARE IN EVERY DROP

MANILA WATER COMPANY, INC.
489 Katipunan Road, Balara 1105,
Quezon City, Philippines
TIN 005-038-428-000 VAT

----- SERVICE INFORMATION -----

Contract Account No. 12345678
Account Name Juan Dela Cruz
Service Address 123-D Amorsolo St., San Pedro Village
Concepcion 1, Marikina City
Rate Class Residential
Business Area Marikina

----- BILLING SUMMARY -----

Bill Date 14 May 2012
Billing Period 14 April 2012 to 14 May 2012
Consumption 13 cubic meters
Total Amount Due P 217.23
Due Date 19 May 2012

----- BILLING DETAILS -----

CURRENT CHARGES
Basic Charge
FCDA
Environmental Charge
Sewer Charge
Maintenance Service Charge
Total Current Charge Before Add VAT (12%) 23.29

OTHER CHARGES
PREVIOUS UNPAID AMOUNT P -0.18
TOTAL AMOUNT DUE P 217.23

----- METER READING INFORMATION -----

Meter No.	Prev Rdg	Pres Rdg	Cons
000015462490	715	728	13

Previous Months Consumption	April	Mar	Feb
	12	13	10

----- PAYMENT STUB -----

Contract Account No. 12345678
Account Name Juan DelaCruz
Service Address 123-D Amorsolo St., San Pedro
Village Concepcion 1, Marikina City
Bill Date 14 May 2012
Billing Period 14 April 2012 to 14 May 2012
Due Date 19 May 2012

Total water consumption and bill is usually found in billing summary section of Water Bill.



Waste

The yellow colored sheet named “**Waste**” monitors the benefits and cost of applying SCP practices when managing waste.

Waste [Mandatory]

How to input data on the **Waste** Tab:

1. Click on the **Waste** Tab.
2. Enter information in mandatory fields: **Monthly Usage of Raw Food Ingredient** and **Waste Disposed as Garbage**. Encode data in blue-colored cells under the corresponding month.

Monthly Data	January	February	March	April	May	June	July	August	September
Monthly Usage of Raw Food Ingredient (Kg)	500.00	400.00							
Waste disposed as Garbage (Kg)	50.00	40.00							
Repurposed Food (Kg)	10.00	10.00							
Food waste used as animal feed (Kg)	20.00	20.00							
Food waste used as fertilizer (incl. Bokashi) (Kg)	30.00	30.00							
Used Oil (Kg)	40.00	40.00							
Pre-Service Food Waste (Kg)	100.00	100.00							
Food (unconsumed) donated (Kg)	10.00	10.00							
Food waste used as animal feed (Kg)	20.00	20.00							
Food waste used as fertilizer (incl. Bokashi) (Kg)	30.00	30.00							
Post-Service Food Waste (Kg)	60.00	60.00							

- Enter information in optional fields: **Repurposed Food**, **Food waste used as animal feed**, **Food waste used as fertilizer**. Only input if this SCP practice is being applied in the restaurant. Otherwise, encode “0”.

3

Show Setup Data									
Monthly Data	January	February	March	April	May	June	July	August	September
Monthly Usage of Raw Food Ingredient (Kg)	500.00	400.00							
Waste disposed as Garbage (Kg)	50.00	40.00							
Repurposed Food (Kg)	10.00	10.00							
Food waste used as animal feed (Kg)	20.00	20.00							
Food waste used as fertilizer (incl. Bokashi) (Kg)	30.00	30.00							
Used Oil (Kg)	0.00	40.00							
Pre-Service Food Waste (Kg)	10.00	100.00							
Food (unconsumed) donated (Kg)	0.00	10.00							
Food waste used as animal feed (Kg)	0.00	20.00							
Food waste used as fertilizer (incl. Bokashi) (Kg)	0.00	30.00							
Post-Service Food Waste (Kg)	0.00	60.00							

4

- The data entry for **Used Oil** is mandatory. Enter information in the blue field.

5. Enter optional information on **Food (unconsumed) donated, Food waste used as animal feed and Food waste used as fertilizer (e.g. Bokashi)**. Only input if the SCP practice is being applied in the restaurant. Otherwise, encode “0”.

Show Setup Data		January	February	March	April	May	June	July	August	September
22	Monthly Data									
23	Monthly Usage of Raw Food Ingredient (Kg)	500.00	400.00							
24	Waste disposed as Garbage (Kg)	50.00	40.00							
25										
26	Repurposed Food (Kg)	10.00	10.00							
27	Food waste used as animal feed (Kg)	20.00	20.00							
28	Food waste used as fertilizer (incl. Bokashi) (Kg)	30.00	30.00							
29	Used Oil (Kg)	40.00	40.00							
30	Pre-Service Food Waste (Kg)	100.00	100.00							
31										
32	Food (unconsumed) donated (Kg)	10.00	10.00							
33	Food waste used as animal feed (Kg)	20.00	20.00							
34	Food waste used as fertilizer (incl. Bokashi) (Kg)	30.00	30.00							
35	Post-Service Food Waste (Kg)	60.00	60.00							
36										
37										

5

Sourcing

The yellow-colored sheet named “**Sourcing**” monitors the benefits and costs of applying SCP practices in sourcing raw food ingredients.



Sourcing [Mandatory]

How to input data on the **Sourcing** Tab:

1. Click on the **Sourcing** Tab.

The screenshot shows the 'Sourcing' tab selected in the spreadsheet. The 'Own Farm Production' section includes a table for 'December' with columns for 'Item', 'Wholesale Price (PHP/Kg)', 'Total Production', 'Average Price', 'Total Savings', and 'Month Saving'. The 'Contract Farming' section includes a table for 'December' with columns for 'Item', 'Farmgate Price (PHP/Kg)', 'Wholesale Price (PHP/Kg)', 'Total Production', 'Average Farmgate Price', 'Average Wholesale Price', and 'Total Farmgate Price'. The 'Sourcing' tab is highlighted in the bottom navigation bar, and a purple circle with the number '1' is drawn around it.

2. When practicing **Own Farm Production**, encode in the green-colored cells all the raw food ingredients sourced by the kitchen from your own farm. Also, enter the corresponding information needed per food ingredient in the blue colored cells. This section is optional.

The detailed view shows the 'Own Farm Production' and 'Contract Farming' sections. The 'Own Farm Production' table has columns for 'Farm Productivity (kg)' and 'Wholesale Price (PHP/Kg)'. The 'Contract Farming' table has columns for 'Farm Productivity (kg)', 'Farmgate Price (PHP/Kg)', and 'Wholesale Price (PHP/Kg)'. Both tables are organized by month (January, February, March, April). The 'Own Farm Production' table has a green header row and blue data rows. The 'Contract Farming' table has a blue header row and blue data rows.

Do you source ingredients from your own farm? If yes, enter here all the varieties of produce you use in the kitchen from your own farm.

Input how much you harvest from your farm every month, and how much you would sell it for. Encode information per produce, per month.

3. When practicing **Contract Farming**, encode in the green-colored cells all the food ingredients sourced by the kitchen through contract farming. Also, enter the corresponding information needed per food ingredient in the blue-colored cells. This section is optional.

Contract Farming			January			February			March			April		
Item	Farm Productivity (kg)	Farmgate Price (PHP/kg)	Wholesale Price (PHP/kg)	Farm Productivity (kg)	Farmgate Price (PHP/kg)	Wholesale Price (PHP/kg)	Farm Productivity (kg)	Farmgate Price (PHP/kg)	Wholesale Price (PHP/kg)	Farm Productivity (kg)	Farmgate Price (PHP/kg)	Wholesale Price (PHP/kg)	Farm Productivity (kg)	
	100.00	20.00	30.00	200.00	25.00	30.00								

Do you source ingredients from contract farming? If yes, enter here all the varieties of produce you use in the kitchen from contract farming.

Input how much of each ingredient you get from contract farming every month, and how much you bought it for (farmgate) and how much you would sell it for on wholesale.

4. When practicing **Import Replacement**, encode in the green-colored cells all the food ingredients that were previously imported and replaced with locally sourced produce. Also, enter the corresponding information needed per food ingredient in the blue-colored cells. This section is optional.

Import Replacement			December		Total Import Replaced	Average Wholesale Price	Average Imported Price	Total Wholesale Price	Total Imported Price	Total Savings
Item	Wholesale Price (PHP/kg)	Imported Item Price (PHP/kg)			150.00	91.67	113.33	13,750.00	17,000.00	3,250.00
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-

Are you replacing imported ingredients with locally produced ones? If yes, enter here all the varieties of ingredients you use in the kitchen that you are now sourcing locally.

Enter all relevant information relating to food ingredients here. All fields are mandatory.

When encoding information in the Sourcing Tab and you need to add additional rows to accommodate the various food ingredients affected by each SCP practice, click on the **INSERT NEW ROW** button.

The screenshot shows an Excel spreadsheet with the following structure:

- Row 4: Column A contains "Enter Number", Column B contains "Example Text".
- Row 5: Section header "Own Farm Production".
- Row 6: Sub-header "Item".
- Rows 7-10: Four green data rows.
- Row 13: A button labeled "Insert new row" is circled in purple.
- Row 15: Section header "Contract Farming".
- Row 16: Sub-header "Item".
- Rows 17-20: Four green data rows.

A callout box with a purple border points to the "Insert new row" button and contains the text: "Add as many rows as you need by clicking on the INSERT NEW ROW button under each Sourcing SCP practice."

At the bottom of the spreadsheet, there are three tabs: "Introduction" (active), "Dashboard", and "Summarized Data".

Caution!

Do not attempt to insert additional rows using other shortcuts in Excel. Please use INSERT NEW ROW button instead.

SCP Investments

Every SCP practice adopted would entail investments in terms of time and money from food service establishments. To complete the analysis, the monitoring tool asks users to input details of the cost of implementing SCP practices into their business operations.



SCP Investments [Mandatory]

The monitoring tool identifies 3 areas of investments – (1) Tools, Equipment & System Cost, (2) Labor or Manpower; and (3) Material Expense.

Definition of SCP Investments:

Tools, Equipment & System Cost – capital expenditure related to the implementation of the SCP practice. Example: water filtering system.

Labor & Manpower – all staff and management involved in the execution and monitoring of the SCP practice.

Material Expense – all consumable parts that must be regularly replaced/purchased to properly implement/execute the SCP practice. For example, filters for the water purification system.

How to input data on SCP Investments Tab:

1. Click on the SCP Investments Tab.

The screenshot shows an Excel spreadsheet with the following structure:

- Row 1:** OTHER COSTS
- Row 2:** Key
- Row 3:** Select Option (yellow), Write Text (green)
- Row 4:** Enter Number (blue), Example Text (grey)
- Row 5:** Tools, Equipment & Systems Cost
- Row 6:** SCP Practice
- Row 7:** Energy: Lighting
- Row 8-9:** Data entry rows with alternating yellow and green backgrounds.
- Row 10:** Insert new row button
- Row 11-14:** Empty rows
- Row 15:** Labor & Manpower
- Row 16:** SCP Practice
- Row 17:** Position
- Row 18:** Personnel Count
- Row 19:** Monthly Rate PHP
- Row 20-21:** Data entry rows with alternating yellow and green backgrounds.
- Row 22:** Insert new row button
- Row 23:** Empty row

The bottom navigation bar includes tabs: Introduction, Dashboard, Summarized Data, Energy, Appliances, Water, Waste, Sourcing, **SCP Investments**, and Calculator. The 'SCP Investments' tab is circled in yellow.

2. Encode Tools, Equipment & Systems Cost. Click on the yellow-orange-colored cell and choose the SCP practice from the drop-down selection. Enter the corresponding information in the blue-colored cells.

The image shows two sequential screenshots of a spreadsheet interface. The first screenshot shows a dropdown menu open over a yellow-orange cell in row 7, column B. The menu lists various SCP practices, with 'Energy: Lighting' selected. A callout box points to the dropdown menu with the text: 'Move mouse over yellow-orange-colored cells to activate drop down option. Choose the specific SCP practice you are recording.' The second screenshot shows the same spreadsheet after the selection. The 'SCP Practice' cell in row 7, column B now contains 'Energy: Lighting'. The 'Item' cell in row 7, column C is empty. The 'Cost PHP' cell in row 7, column D contains '120,000.00', the 'Acquired Month/Year' cell in row 7, column E contains '01/2020', the 'Life Years' cell in row 7, column F contains '10', and the 'End of Life Month/Year' cell in row 7, column G contains '01/2030'. A callout box points to the 'SCP Practice' cell with the text: 'After choosing specific SCP practice from the drop-down list, encode necessary information in the blue-colored cells.'

3. Encode Labor & Manpower Cost. Click on the yellow-orange-colored cell and choose the SCP practice from the drop-down selection. Enter the corresponding information in the blue-colored cells.

Move mouse over yellow-orange-colored cells to activate drop-down option. Choose the specific SCP practice you are recording.

SCP Practice	Position	Quantity	Unit Cost PHP	Date Purchased Month/Year

Total Cost

After choosing specific SCP practice from the drop-down list, encode necessary information in the blue-colored cells.

SCP Practice	Position	Personnel Count	Monthly Rate PHP	Start Date Month/Year	End Date Month/Year

Monthly Cost

4. Encode Material Expenses. Click on the yellow-orange-colored cell and choose the SCP practice from the drop-down selection. Enter the corresponding information in the blue colored cells.

24	Material Expenses					
25	SCP Practice	Material	Quantity	Unit Cost PHP	Date Purchased Month/Day/Year	Total Cost
26						--
27	Energy Lighting					--
28	Energy Storage					--
29	Energy Air Conditioning					--
30	Energy Renewable Energy Equipment					--
31	Water Efficiency Equipment/Fixtures/Devices					--
32	Water Saving Equipment					--
33	Waste Reduction					--

Move mouse over yellow-orange-colored cells to activate drop-down option. Choose the specific SCP practice you are recording.

24	Material Expenses					
25	SCP Practice	Material	Quantity	Unit Cost PHP	Date Purchased Month/Day/Year	Total Cost
26						--
27						--
28						--
30	Insert new row					

After choosing specific SCP practice from the drop-down list, encode necessary information in the blue-colored cells.

How to insert additional rows:

When encoding information under the various SCP INVESTMENTS and you need to add additional rows, click on the INSERT NEW ROW button.



Labor & Manpower						
SCP Practice	Position	Personnel Count	Monthly Rate PIP	Start Date Month/Year	End Date Month/Year	Monthly Cost
						-
						-
						-
Insert new row						

Material Expenses					
SCP Practice	Material	Quantity	Unit Cost PIP	Date Purchased Month/Year	Total Cost
					-
					-
					-
Insert new row					

Add as many rows as you need by clicking on the INSERT NEW ROW button under each SCP investments.

Summarized Data

For the purposes of decision making, this sheet details, summarizes, and translates each encoded data from the various yellow-colored sheets in the TSD-CB Monitoring Tool. It collects the information from Energy, Water, Waste, Sourcing, and SCP Investments.



This is the programmed data analytics section of the monitoring tool. **No action is required from the user.**

Energy Monthly Monitor Averages Investments

	Jan-20	Feb-20
Monthly benefit from energy saved (PHP)	48,837.50	97,675.00
Accumulated Benefit	48,837.50	146,512.50
Food Establishment (Kwh/m ² /mo)	1.33	1.33
Energy Saved Monthly (Kwh)	48,837.50	48,837.50
Energy: Total SCP Investment	P 22,000.00	P 22,000.00
Energy: Accumulated SCP Investment	P 22,000.00	P 44,000.00
Energy: Appliances	P 21,000.00	P 21,000.00
Energy: Total Tools, Equipments & Systems	P 1,000.00	P 1,000.00
Energy: Lighting	P 1,000.00	P 1,000.00
Energy: Storage	P -	P -
Energy: Air Conditioning	P -	P -
Energy: Renewable Energy Equipment	P -	P -
Energy: Total Labor & Manpower	P -	P -
Energy: Lighting	P -	P -
Energy: Storage	P -	P -
Energy: Air Conditioning	P -	P -
Energy: Renewable Energy Equipment	P -	P -
Energy: Total Material Expenses	P -	P -
Energy: Lighting	P -	P -
Energy: Storage	P -	P -
Energy: Air Conditioning	P -	P -
Energy: Renewable Energy Equipment	P -	P -

Water Monthly Monitor Averages Investments

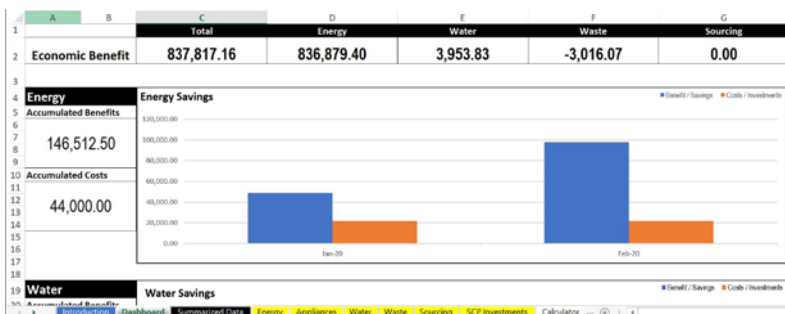
Introduction Dashboard Summarized Data Energy Appliances V

Dashboard

The results of the data analytics are visually represented in charts and graphs on the dashboard for easy reference.

This is a programmed section of the monitoring tool.

No action is required from the user.

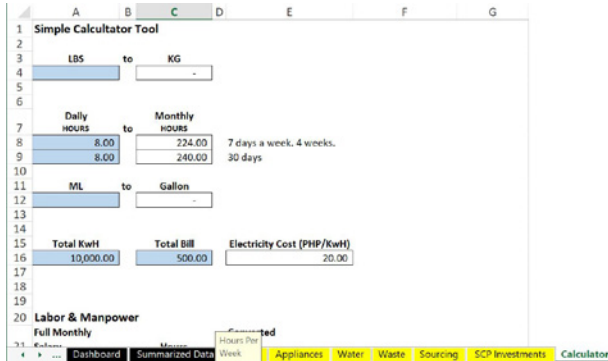


Calculator

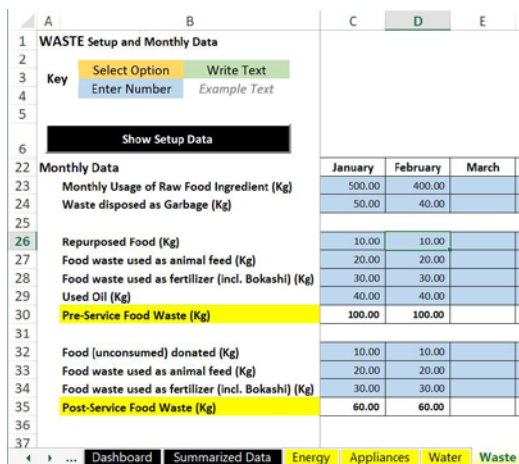
For easy computation and conversion of available information into data that the monitoring tool can recognize, a built-in calculator is provided for users.



For easy computation and conversion of available information into data that the monitoring tool can recognize, a built-in calculator is provided for users.



Users can use this tool to convert their data to the appropriate unit of measurement required by the tool. The unit of measurement required for every data entry is indicated inside parentheses.



Reminder: Inputting data in the correct unit of measurement is important so that the tool can properly compute for the benefits.

FAQs

Frequently Asked Questions



General FAQs

- **What is the main difference between the Greenhouse Gas Abatement Cost Model (GACMO) tool and this TSD-CB Monitoring Tool?**

The GACMO tool mainly tracks energy consumption and greenhouse gas (GHG) emissions from the specific activity areas of establishments, such as air-conditioning, water heating, lighting, equipment operations, food delivery and preparation. The TSD-CB Monitoring Tool tracks benefits in the form of resource (energy, water, food) savings, added value creation, reduced carbon emissions, etc. associated with sustainable consumption and production (SCP) practices in four (4) areas of sustainability, namely energy, water, waste (food and non-food), and local sourcing.

GACMO therefore focuses on the environmental impacts of the various activities of food service establishments (e.g., what type of energy is utilized, how much pollution is added or reduced based on activity). It does not include analysis on the expanded economic impacts, such as the value generated by re-use and recycling of waste, and social conditions which were considered in the expanded cost-benefit study which was the basis of the TSD-CB Monitoring Tool.

GACMO was also created specifically for hotels while the TSD-CB Monitoring Tool was created for food service establishments and used local (Philippine) data.

- **What are the technical requirements of the TSD-CB Monitoring Tool?**

1. A PC running Windows 10
2. Latest version of Microsoft EXCEL
3. Latest version of TSD-CB Monitoring Tool

- **Can I use a personal tablet device for the TSD-CB Monitoring Tool?**

No. EXCEL for Macintosh does not have the full technical capabilities versus the Microsoft EXCEL version. EXCEL apps for

small screens - mobile and personal tablets - are also different from computer-based EXCEL and have limited features. The TSD-CB Monitoring Tool uses advanced features only accessible via the Microsoft Excel personal computer version.

- **Where can I get more information on how to use the TSD-CB Monitoring Tool?**

Apart from this TSD-CB Monitoring Tool Manual, a good source of additional information is the TSD-CB Monitoring Tool video training. The video training contains the following information:

Timestamps:

- 1:02** What's In It For Me?
- 1:48** Limitations
- 2:00** Technical Requirements
- 2:49** Setting Permissions
- 4:46** General Set-up
- 5:22** Getting Started
- 9:15** Investments
- 15:10** Energy
- 21:00** Energy (Appliances)
- 25:49** Water
- 29:51** Waste
- 34:59** Sourcing
- 38:34** Calculator
- 39:54** Dashboard
- 48:58** Contact Details

Watch the instructional video at bit.ly/CBToolVideo or scan the QR code.



- **Where can we find the summarized results?**

The summarized results are found in the summarized data in the TSD-CB Monitoring Tool and illustrated in the dashboard tab.

FAQs on SCP Practices

- **Aside from the four common appliances given, do we need to add other types of appliances?**

No, the TSD-CB Monitoring only asks for four (4) types of appliances. This is because the CBA Study and its accompanying research, that is the basis of the formulas used in the TSD-CB Monitoring Tool, discovered that these four (4) appliances are the biggest consumers of electricity in food service establishments. An average food service establishment in the Philippines were also found to have all of these four (4) types of electricity equipment in their business.

- **How to compute the H₂O produced (m³/mo)?**

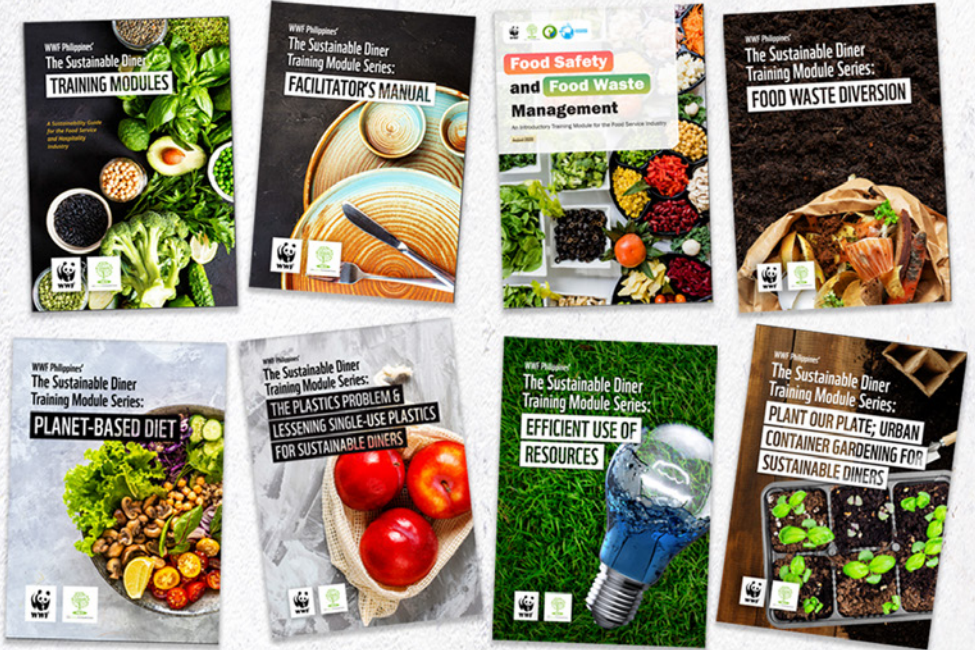
The H₂O produced can be computed by the maximum volume capacity of the water tank multiplied by the number of times in a month the water tank needs to be refilled.

- **What is the difference between the “distance difference” and “average mileage” data in the Sourcing?**

Distance difference is the actual distance from the restaurant (origin) to the location where the raw ingredients are sourced (e.g. farm or market). Average mileage is the distance difference divided by the number of raw food ingredients sourced in a particular location.

- **Why is it that the quality of food source is not factored in the computation of cost-benefit in the application of SCP practices in local sourcing?**

One of the acknowledged limitations under the scope of research of the cost-benefit analysis (CBA) of SCP practices in Food Service Establishments is the exclusion of the measure food source quality. What inputs are needed in the TSD-CB Monitoring Tool and how they are computed are all taken from the CBA Study so the tool also carried with it the limitation of the CBA Study.



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A Key Ingredient For Sustainable Tourism



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