# Sustainable Design

and

# **Construction Guidelines**

# How-To Guide

West Coast Ports Technical Committee International Institute for Sustainable Seaports American Association of Port Authorities





Overview: This document serves as a short "How-To" reference guide for the Joint West Coast Ports Technical Committee's Sustainable Design and Construction Guideline referred to herein as the "tool". The How-To Guide contains bulleted instructions and screenshots to assist in proper tool operation. Instructions are organized by worksheet "tab" as listed below.

# General

Macros

- 1. Use of the "West Coast Ports Sustainable Design and Construction Guidelines (tool)" requires use of VBA macros. Macros must be enabled in order to secure full functionality of this tool.
- Please adjust your VBA security settings to turn on macros. Instructions: <u>http://office.microsoft.com/en-us/excel-help/enable-or-disable-macros-in-office-files-</u> <u>HA010354316.aspx?CTT=1</u>
- 3. The macros also are applied when a user opens or saves the workbook. These additional macros help track tool use over time.

## User Privileges

- This tool is built to restrict the basic user functionality to data entry only. The tool asks for user name upon log-in and tracks what user last updated and saved the tool in the "Project Manager Inputs" tab.
- The User can add new strategies via the "Add New Strategy" macro. The user can then select strategies to implement (and provide supporting information) on the "Project Checklist Summary" tab.

# Instructions by Tab

Start Page

1. The Start Page works as a "Table of Contents" for the rest of the tool. The Start Page provides limited instructions as well as links to other tabs in the workbook. The Start Page also provides links to the sponsoring organizations and tracks version number and date.



-		Links to Port Websites:
ab Name Project Manager Inputs	Instructions On this tab the Project Manager enters basic Project/Port information and identifies applicable Project Areas through the use of checkboxes. There are 23 Project Areas to choose from, and one or more Project Areas may be selected. After a Project Manager has selected the relevant Project Area(s), tabs for each of those Project Area(s) will become visible.	Unified Port of San Diego
Project Checklist <u>Summary</u>	The Project Checklist Summary will show available strategies (from "Master Checklist") for each Project Area selected in the 'Project Manager Inputs' tab. On the Project Checklist Summary tab, the user can select strategies Proposed and/or Implemented for each Focus Area included in that Project Area. Additional columns are available for strategy detail.	
Project Areas	Project Area tabs will show for each Project Area selected (via checkbox) in the 'Project Manager Inputs' tab. On each Project Area tab, the user can view sustainability strategies utilized for each Focus Area included in that Project Area. Users can Add New Strategies in the "Master Checklist" and provide strategy detail in the "Project Checklist Summary".	Port of Vancouver U
Summary Report	This tab shows a summary report, including: - A list of selected sustainability strategies, by selected Project Area - A tally of sustainability strategies, by Project Area and Focus Area - Graphs and charts summarizing sustainability strategies and associated benefits	

#### Project Manager Inputs

- 1. The Project Manager Inputs tab is used to enter general information about a specific project. On this tab, the User enters information in a user-friendly form (with on screen directions), in the following required text fields:
  - a. Project Name
  - b. Project Manager
  - c. Sustainability Lead
  - d. Last Updated (date of last save, this is updated automatically via macro)
  - e. Updated By (last person to save file, this is updated automatically via macro)
  - f. Port
  - g. Sponsor
  - h. Project Number
  - i. Current Project Phase
  - j. Project Location
  - k. Review Operational Checklist (Yes/No dropdown)
  - I. Consultant Name
  - m. Sponsoring Agency
  - n. Operational User
  - o. Estimated Budget (\$)
  - p. Final Project Cost (\$)
  - q. Date of Approval (MM/DD/YY)
  - r. Target Completion Date (MM/DD/YY)



Project Name:			
Project Manager:		Sustainability Lead:	
Last Updated:	4/18/2014	Updated By:	mdb
Port:		Sponsor:	
Project Number:		Current Project Phase:	
Project Location:		Review Op. Checklist:	
Consultant Name:		Sponsoring Agency:	
Operational User:			
Estimated Budget:		Final Project Cost:	
Date of Approval:		Target Completion Date:	

2. In addition there are fields for the user to enter additional information about the project, which is optional.

Additional Info (Optional)				
Project Details:	Additional Details			
-				
Notes:	Notes			

3. Next the user selects applicable Project Areas for their Project. There are 14 Project Areas. As the user checks project area names, the tabs for those project area details become unhidden, and the hyperlinks to those tabs become active. Furthermore, project area definitions will be available by selecting the cell for each project area name.

Select Applicable Project Areas						
Click on Project Area names to view definition.	<ul> <li>Demolition and Disposal</li> <li>Dredging</li> <li>Marina</li> <li>Remediation</li> <li>Renewable Energy</li> <li>Revetment, Breakwaters, Dikes</li> <li>Security Improvements</li> </ul>	Seismic ProtectionSite and Landscape DevelopmentTechnologyTerminal DevelopmentTrafficUtilitiesViViWharf and Piling				

# Master Checklist

Warning: Never add or delete rows manually on this tab. Use the macros to add new strategies. If a strategy is no longer used, just delete the "X" for each corresponding Project Area.

- 1. The "Master Checklist" tab is a read-only tab whereby the user can see the list of all possible sustainability strategies to apply to their project. The tab is hidden and users can easily un-hide the tab when needed. Note worksheet is password-protected for administrative editors only.
- 2. Only the Tool administrator (I2S2) can change the text for existing strategies, or the list of which strategies are applicable (via "X"). This sheet is password-protected for administrator edits only.
- 3. The Project Users can "Add New Strategy" via the Add New Strategy button. This button brings up a user form that lets the user enter information about a new "Considered" strategy, strategy "Required by Regulation", or "Additional (Project-specific)" strategy.



Add New Strateg	ду			x
Strategy Type		•		
Strategy Descrip	tion:	_		
Select Applicab	le Project Areas:			
Demolition	Renewable Energy	Site and Lanscape Development	Utilities	
Dredging	Revetment, Breakwaters, Dikes	Technology	Wharf and Piling	
Marina	Security Improvements	Terminal Development	ALL	
Remediation	E Seismic Protection	Traffic	Submit	

#### Project Checklist Summary

- 1. The Project Checklist Summary is where the user can see all relevant strategies that are applicable to **only** the project areas they selected on the 'Project Manager Inputs'. Note if no project areas are selected on 'Project Manager Inputs', there will be no strategies listed here.
- 2. This tab is editable in columns **AC-AK**.
  - a. **T-U:** On this tab, the user tracks which strategies are Proposed and/or Implemented (*NOTE Any Implemented Strategy by default is proposed*). Note the tally of proposed and implemented strategies (by project area and focus area) is incorporated into "Summary Reports".

Proposed	Implemented ,
?	?
X	Yes

b. **V-X:** here the user provides supporting information about the strategy and why it was or was not implemented.

Why Not Implemented /		Resources for
Why Not Applicable?	Supporting Details	Additional Information
i. These are tex	t fields for supporting	information only.

c. **Y:** Here the user enters optional "Strategy Weight" for Implemented Strategies, on a scale of 1-10. This column is completely optional.





d. **Z-AB:** Here the user optionally marks an "X" for any strategies with Economic, Environmental, and/or Social impacts. This column is completely optional.



# Project Areas (14 tabs)

Note: These tabs are read-only at this time. Please make any updates to strategy selection and supporting data on "Project Checklist Summary" tab.

- 1. The Project Area tabs are visible if a given Project Area is checked in the "Project Manager Inputs" checklist.
- 2. When the user clicks on a Project Area tab (i.e. 'Project Area Demolition and Disposal') they automatically see strategies that are applicable to that Project Area.
- At the top the user can also select a Focus Area to filter by on the same tab.
   Project Area: Demolition and Disposal
   Focus Area: Maintenance, Monitoring, Reporting

#### Summary Report

The 'Summary Report' tab is used to tabulate project "success" against various metrics.

- 1. First the user must "Select Project Area" to populate charts. The user can select an individual project area or "ALL" project areas.
- 2. Chart 1 tracks average weight by strategy vs. number of strategies selected. Furthermore this graph shows three-dimensionally the percent of strategies selected, as represented by size of bubble. Note this Chart displays optional data only, as strategy weights are not required for this tool.
- **3.** Chart 2 tracks summary of strategy select by focus area. This chart is simply a stacked bar chart tallying selected vs. unselected strategies for each focus area.
- 4. Chart 3 tracks a tally of Economic, Environmental and Social Contributions. Simply put, this is a bar chart for each of the three metrics, and counts how many strategies incorporate each. Note this Chart displays optional data only, as Economic, Environmental, and Social Contributions by strategy are not required for this tool.



- 5. Summary Tables show a summary of selected strategies for the selected project area, by focus area. These tables comprise the data that populate the charts above, and are populated as part of a macro by the "Select Project Area" option at top.
  - a. These tables, similar to charts, focus on the "Implemented" strategies vs. the Proposed Strategies, as shown in "Project Checklist Summary".
- 6. List of Criteria Implemented. At the bottom of the sheet is a summary of the criteria (strategies) implemented for a given project area (or "ALL") as selected on button "Select Project Area". This table summarizes all data from "Project Checklist Summary" in a concise fashion, and list details on each strategy selected for the given project.

#### Summary Charts by Project Area PROJECT AREA: ALL Link to Chart Descriptions Chart 1: Strategy Selection & Weight by Focus Area Chart 2: Summary of Strategy Selection by Focus Area Chart 3: Summary of Economic, Environmental, Social Contributions (Count) mplemented Strategies Implemented Strategies 4.5 6 4 50% trategy 5 3.5 Weight by 9 3 З 3 2.5 Ave rage 2 2 1.5 2 1 1 0 0.5 1.5 2.5 2 1 of Strategies Selected © Economy © Maintenance, Monitori © Natural Resources 0 e A is e Energy ing, I Materiab Public Outread Safety and Security @Site Development Transportation Environmental Social Economic ●Waste ●Project Specific Criteria @ Water

# Example 'Summary Report' graphs:

# Example 'Summary Report' tables:

Summary Tables Contributions DATA FOR GRAPHS											
		1	Total		CONTRADUCTOR			Non-		Avg. Score	
1 1			Percent	Weighte					Implemente		per
Project Area	Focus Area	Summary of Selected Strategies	Selected	d Score	Economic	Environmental	Social	d Strategies			
	Air	2 out of 4 (50%)	50%	11	2	0	2	2	2	4	5.50
ALL	Economy	0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
ALL	Energy	0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
	Maintenance,										
		0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
		0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
		0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
ALL	Public Outreach	1 out of 2 (50%)	50%	5	1	1	1	1	1	2	5.00
		0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
ALL	Site Development	0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
	Transportation	0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
	Waste	0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
		0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
	Project Specific Criteria	0 out of 0 (0%)	0%	0	0	0	0	0	0	0	0.00
SUMMARY			50%	16	3	1	3	3	3	6	5.33
List of Criteria Implemented Click Here to Add Implemented Measures for this Project Area.											
Project Area	Focus Area	Strategy	Strategy Type	Strategy Weight	Economic	Environmental	Social				
ALL	Air	Using harbor craft with Tier 3 engines or cleaner.	Considered	5	X		×	1			
ALL	Air	Reducing the speed of ships and barges delivering construction-related materials (12 knots for ocean-going vessels).	Considered	6	×		×				
ALL	Public Outreach	Posting public meetings, presentations, agendas and project material on the Port/Project	Considered	5	×	Х	×	]			

# Summary

This tool is a useful way for Project Managers to track sustainability strategies proposed and implemented across all types of projects at their port. The tool is set up to work for any port, but can be made more specific by addition of Port-specific strategies. The tool is useful for Project Managers in decision-making, reporting, and recordkeeping.

The West Coast Ports Technical Committee is a collaborative of seven west coast ports (Port of Vancouver US, Port of Seattle, Port of Tacoma, Port of Portland, Port of Los Angeles, Port of Long Beach, Port of San Diego) and the International Institute for Sustainable Seaports (I2S2) who worked together to develop these Sustainable Design and Construction Guidelines.



I2S2 is a partnership between the Global Environment & Technology Foundation, a 501 c (3) not-for profit and the American Association of Port Authorities. I2S2 is dedicated solely to providing sustainable practices information, field test-tools and materials to support implementation by all ports and members of the maritime community. For more information on I2S2 or the Sustainable Design and Construction Guidelines please contact Noeleen Tillman <u>ntillman@getf.org</u> or Meredith Martino <u>mmartino@aapa-ports.org</u>.





