

# Thermoeconomic Analysis Toolbox

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## cThermoeconomicModel Methods

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### Set Methods

Name	Description
setState	Set a new valid state from StateNames
setReferenceState	Set a new valid reference state from StateNames
setResourceSample	Set a new valid ResourceSample from SampleNames
setCostTables	Set a new value of CostTables parameter
setDiagnosisMethod	Set a new value of DiagnosisMethod parameter
setActiveWaste	Set a new waste flow for recycling analysis
setRecycling	setRecycling - Set Recycling parameter
setSummary	Set a new Summary available option
setDebug	Set debug control variable
toggleDebug	Toggle debug property

### Result Info Methods

Name	Description
productiveStructure	Get the Productive Structure cResultInfo object
exergyAnalysis	Get the ExergyAnalysis cResultInfo object for the current state
thermoeconomicAnalysis	Get the Thermoeconomic Analysis cResultInfo object for the current state
productiveDiagram	Get the productive diagram cResultInfo object
diagramFP	Get the diagram FP cResultInfo object of rhe current state
thermoeconomicDiagnosis	Get the Thermoeconomic Diagnosis cResultInfo object
summaryDiagnosis	Get the diagnosis results summary
wasteAnalysis	Get the Waste Analysis cResultInfo object
summaryResults	Get the Summary Results cResultInfo object
dataInfo	Get the data model cResultInfo object
getResultInfo	Get the cResultInfo with optional parameters

## Model Info Methods

Name	Description
showProperties	Show the values of the current parameters of the model
isDiagnosis	Check if diagnosis computation is available.
isDirectCost	Check if Direct cost tables are selected
isGeneralCost	isGeneralizedCost - Check if Generalized cost calculation are activated
isResourceCost	Check if the model has resources cost defined
isWaste	Check if model has waste defined
showResultInfo	Show or get a structure containig the results of the model

## Summary Info Methods

Name	Description
isSampleSummary	Check if Samples Summary results has been activated
isStateSummary	Check if States Summary results has been activated
isSummaryActive	Check if Summary has been activated
isSummaryEnable	Check if Summary is enable
summaryOptions	Get the available summary option names

## Table Info Methods

Name	Description
getTable	Get a table called name, if its available
getTableInfo	Get the properties of a table
getTablesDirectory	Create the tables directory of the active model
showTablesDirectory	Show the list of available tables

## Result Set Methods

Name	Description
ListOfGraphs	Get the list of graph tables as cell array
ListOfTables	Get the list of tables as cell array
StudyCase	Get/display the study case names
exportResults	Export result tables into a structure using diferent formats.
exportTable	Export tname into the selected varmode/format
getTableIndex	Get the table index of the results set
printResults	print the result tables on console
saveResults	Save result tables in different file formats depending on file extension
saveTable	Save a result table into a file depending on extension
saveDataModel	Save the data model in a file
saveDiagramFP	Save the Adjacency matrix of the Diagram FP in a file
saveProductiveDiagram	Save the productive diagram adjacency tables into a file
saveSummary	Save the summary tables into a filename
showTableIndex	View the index table of the results set
showDataModel	Show Data Model tables
showGraph	Show a graph table.
showResults	View an individual table
showSummary	Show Summary tables

## Waste Methods

Name	Description
wasteAllocation	Show waste information in console
setWasteRecycled	Set the waste recycling ratios
setWasteType	Set the waste type allocation method for Active Waste
setWasteValues	Set the waste table values

## Resource Methods

Name	Description
addResourceData	addExergyData - Set exergy data values to actual state
getResourceData	Get the resource data cost values of sample
setFlowResource	setFlowResources - Set the resource cost of the flows
setProcessResource	Set the resource cost of the processes

## Exergy Methods

Name	Description
addExergyData	Set exergy data values to actual state
getExergyData	Get cExergyData object of a state
setExergyData	Set exergy data values to actual state

## Internal Methods

Name	Description
updateDataModel	update the data model if have been changes
getResultState	Get the cExergyCost object of each state
getModelResults	Get a cell array of cResultInfo objects of the current state
getSampleId	Get the Sample Id given the resource sample name
getStateId	Get the State Id given the name.
getWasteId	Get the Waste flow Id