

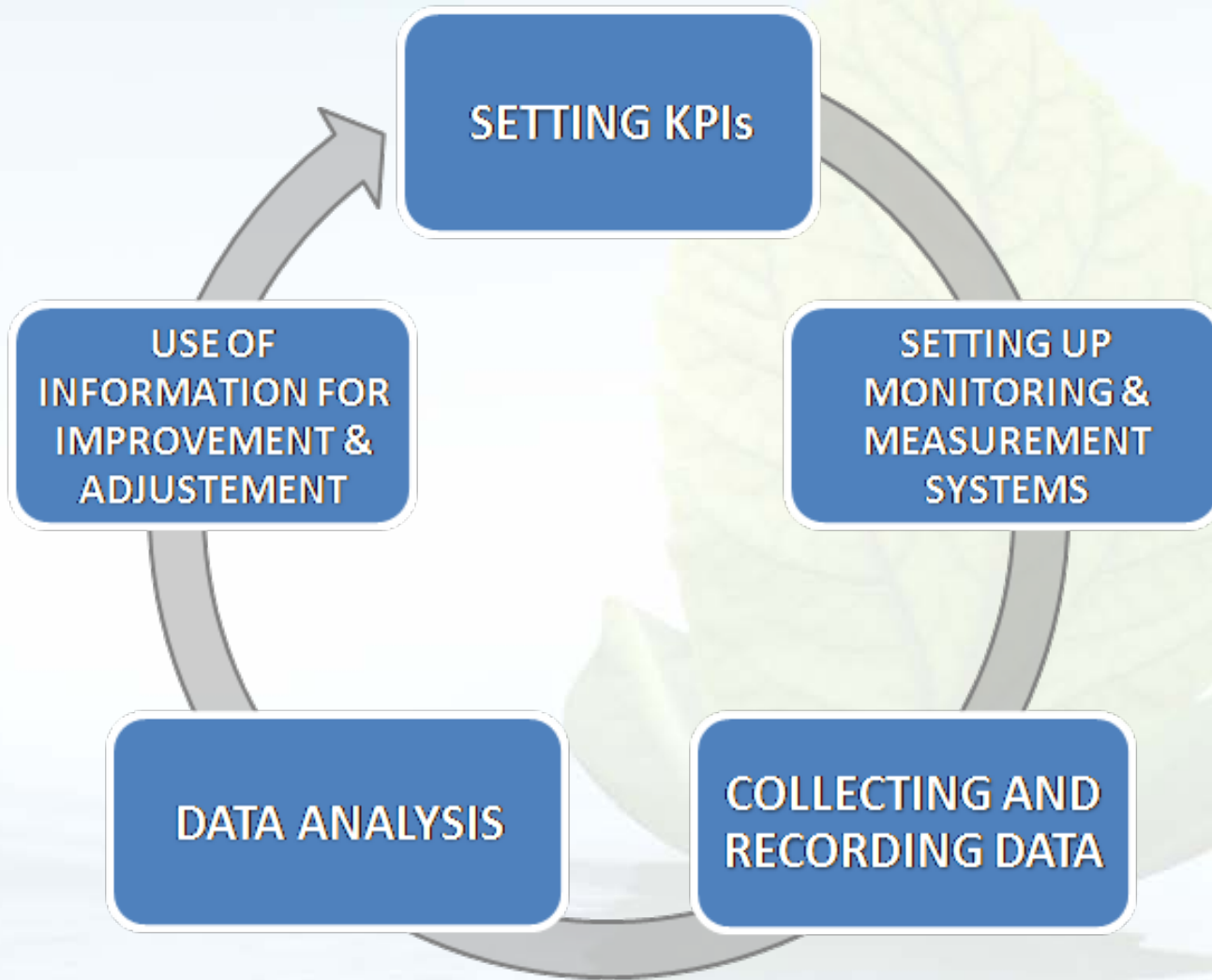
# Assessment For The Effectiveness Of GHG Control And EE Uptake – The need for KPI's

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# Key Performance Indicators



The objectives of KPIs are to:

- Measure for continuous improvement
- Measures for internal benchmarking
- External benchmarking
- Measure to set incentives

# Use of KPI to establish Performance Index

- Environmental Performance Index can be established by the administration for self evaluation based on the weighted average of relevant KPI.
- This will allow the analysis of the registered tonnage under its flag.
- It will also help to design the strategy to control emissions, in its role as port state.

# KPI Examples



- Design and Technological measures
  - EEDI
- Operational measures
  - Leading KPI (proactive approach) - monitoring the number of propeller polishes or hull cleanings carried out.
  - Lagging KPI (reactive approach) – measuring fuel consumption per day as KPI towards SPI.

Fuel consumption per 24 hours is the historical energy efficiency measure used on-board ships.

# Understanding relationship between EEDI, EEOI, SEEMP towards developing KPI's

Design Stage	Construction	Sea Trials	Operations		
Calculate EEDI					
	Verify EEDI				
			SEEMP	Planning	Improvement
			EEOI	Monitoring	

# Where are we as of now?

Design and operational aspects

Influencing factor is mainly Compliance factor

EEDI applies only to new ships

SEEMP has added to the list of documents required on board

# Are we making a difference?

KPI	Legislation	0.34	Ratification			
		0.33	Domestic Legislation			
		0.33	Implementation			
	Flag State	0.34	Training		Flag State Duties	
		0.33	Incentive Scheme			
		0.33	Establishment of an EE focal point			
		0.33	Database established		Green Technology database	
		0.33	Awareness activity / stakeholder arrangement			
		0.34	Incentive scheme facilitating uptake of technology			
		0.34	Reporting mechanism from ships established			
		Port State	0.33		Reporting mechanism to IMO established	Database on Fuel reporting
			0.33		Methodology on verification of data established	
			0.33		Database on emissions from vessels as port state	
			0.33		Incentive scheme if any	
			0.34		EE / SEEMP CIC Inspections carried out	
		5.0				



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*Thank You!*



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