Water as a Business Risk



SUSTAINABLE BUSINESS LEADERSHIP FORUM

INSTITUTED BY SUSTAINABILITY OUTLOOK



Who we are

- Sustainable Business Leadership Forum (SBLF) is an Indian industry focused market development platform which equips organizations, managers and industry stakeholders on the 'how' of sustainability through a unique programmatic approach comprising of round the year programs and 'on-ground industry oriented' work.
- Based on membership inputs and requests for focused research, the Forum facilitates creation of Industry Task Forces guided by industry catalysts and corporates. The advantages of members working as a group on common issues are:
 - Build shared insight on sometimes, complex issues
 - Pool in resources with other like-minded agencies and institutions
 - Generate attention from the relevant customers, stakeholders, etc. that is larger than if done by members individually.
- Water as a Business Risk is a exploratory conversation to see explore the extent to which water sustainability is factored into business decisions (F&B, Paper)



Point of Arrival for this Session

Old Way of Thinking about Water Traditionally, water has been an under-priced resource.

For the industrial sector, pressure on water resources manifests through:

- Underutilization of installed capacity
- Curtailing of growth plans
- Instances of operational shutdown

Recognising 'Water as Business Risk' and 'Value Created by Water' Interconnectedness and integral nature (incl. 'value') of water to a business's or a nation's core manufacturing operations:

- Cost of treatment of input water
- Embodied cost of energy
- Embodied cost of productivity (e.g. turn-around time for processes, quality of outputs)
- Efficiency in materials recovery (e.g. chemicals, dyes, fibres)
- Burden of effluent treatment (where mandatory)
- Burden of water infrastructure & power consumption for transport, handling & storage
- Capacity for growth & expansion with respect to water supply

Embodied Value of Water – a Systems Approach to Water Sustainability sees water as a 'valuable medium' for resource flows and analyses impact of material flows (a) within industries, and (b) cross industries on the overall value & usage of water

LOWER THAN OPTIMAL EVW	CLOSE TO OPTIMAL EVW	OPTIMAL EVW*
Low revenue Profit maximization sensitive to marginal cost rise	High revenue Profit maximization less sensitive to cost rise	Price of Product
Water abundance Overuse / inefficient use of water & resources	Increased water & resource efficiency Increasingly limited supply	Water Consumed *under optimal conditions for a location + product

Types of Interventions for Water Sustainability (to date)

- Within the fence
 - Process Benchmarks
 - Manufacturing & Product Design
 - Treatment, Recovery, Recharge

- Beyond the Fence
 - Water risk metrics
 - Community / Basin development
 - Shared assets for Treatment, Recovery, Recharge

An Alternative View of Water Sustainability Interventions

Existing 'Linear' Systems			Complex System
Shared Water Harvesting	Energy Exchange	Organic Materials	Inter-Dependent Physical
Common ETPs	Shared Community	Exchange	Footprint at Specific
	Development	Input Supply Chain	Locations

Factoring water sustainability into business decisions: a portfolio approach

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Industry	Actual EVW	Optimal EVW
		(Process Changes)
Pulp and Paper	Rs. 211/Tonne	Rs. 467/Tonne
Major Beverages	Rs. 1548/KL	Rs. 5890 / KL



Process Based EVW Optimisation for Beverage Sector



Taking into account:

- The revenue generating potential of water in the end product
- The EVW gap between observed and best practice
- The overall production mix of the sector



Provoking questions

- What sorts of water sustainability results can we achieve 'within the fence'?
- What are 'burning issues' and challenges in implementing water sustainability best practices in India?
- When does it become difficult for individual players to 'move the needle' on what sustainability on their own? How do they manage water risks 'beyond the fence'?
- How do we infuse longevity into water sustainability interventions?
- What role will technical & business innovation have in ushering uptake for large scale water recycling and treatment infrastructure in India?



Thank You

