Managing Water in the Supply Chain:

HCC's Understanding, Basic Expectations and Perceptions of Best Practice



DISCLAIMER This presentation contains certain forward looking statements concerning future business prospects and profitability of HCC, which are subject to a number of risks and uncertainties and actual results could materially differ from those in such forward looking statements . important developments that could affect the company's operations include a downtrend in the infrastructure sector, significant changes in political and economic environment in India, tax laws, labor relations, litigation etc. The company does not undertake to make any announcement in case any of these forward looking

statements become materially incorrect in future or update any forward looking statements made from time to time by or on behalf of the company.

HCC: A Construction Company with Constructive Approach

HCC Group

The HCC Group which spans Construction, Real Estate and Infrastructure Development, specializes in technically complex, new-age construction in infrastructure projects, as well as EPC, BOT, Integrated projects and townships.

HCC's group companies comprise of HCC Construction, HCC Infrastructure, HCC Real Estate, Lavasa Corporation and HCC Capital.

HCC Construction and Infrastructure

HCC is India's leading construction and infrastructure development company with a 80 years of rich heritage.

The Company has managed and executed several technically complex and high value projects across segments like Transportation, Power Generation, Infrastructure, Marine projects, Oil & Gas Pipeline Constructions, Irrigation & Water supply, Utilities and Urban Infrastructure.



HCC's Understanding

HCC's Supply Chain: From Broad View to Elaborate Approach

Broad View:

HCC delivers Construction Works & Infrastructure to Clients

Clients include, Government Depts, Public Sector bodies, Private Sector Businesses

HCC procures materials & equipments from suppliers, processes the materials to deliver the product: "Construction Works"

Elaborate View:

Emphasizing Supply Chain Mapping & Water Foot print

Nature is the Primary & Sole Upstream Supplier

Consumes Water, Energy and Fuel for Transportation during the process of delivering the product

Recognizes significance of applying water foot-printing: Attending to indirect water consumption



Emphasizing Supply Chain Mapping & Water Foot print

Supply Chain Mapping: A pre-requisite

Elements of Supply Chain less visualized, less documented Supply Chain envelops:

Extractive Industries like clinker, stone quarrying, iron ore ...

Mineral processing

Production & manufacturing e g Steel, & Cement

But also,

Energy production & Transportation Activity is generally not accounted for...

Foot-printing:

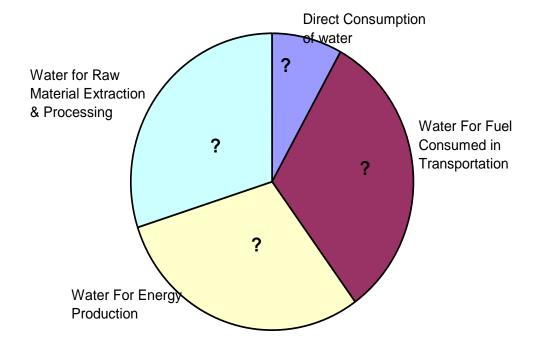
Foot-printing in the upstream Supply Chain is less quantified Footprint of water consumed for Power Production & Resources Consumed in transportation activity



Quantification Gap /Challenge

Availability of Quantitative Data remains a challenge

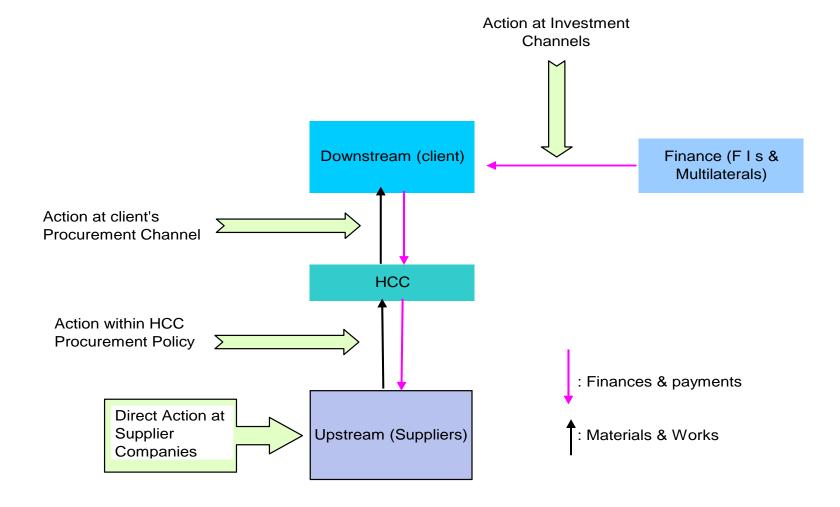
Relative proportion of Water Use in the Supply Chain: Still Unknown!





Next Steps Necessary: HCC's Plans

Actions: At Supplier Companies, Procurement & Investment Channels





Direct Action at Supplier Companies

Develop baseline:

Collating & Interpreting the information for the Supply chain

Promote Studies & Surveys to Collate the information with the suppliers, their industry sector networks & water utilities

Help upstream Supply Chain components to generate & collate the information

Thrust Sector identification:

Proportion within the Supply Chain

Assessment of 'Reduction Potential' at upstream suppliers

Benchmark Development:

Sector Specific Benchmarks - through CSI (Cement Sustainability Initiative)

Promote Action for Water efficiency:

Advocacy for reducing water consumption & for developing watersheds

Approach: **Supported Advocacy**Promote Bureau of Water Efficiency



Action at Procurement & Investment Channels

Induce Suppliers for Water efficiency:

Incorporate "Water Responsible Procurement" in HCC's procurement policy. Procurement preference to Water Efficient Suppliers

Lobby the Clients & Governments:

For considering 'Water Consciousness' as a bidding criteria

Influencing the 'Water Consciousness' in procurement through investor route

Representations to FIs for influencing the water consciousness in procurement by public sector, governments; through inclusion of water efficiency parameter in standard contracts, beyond ISOs?

Seek support

For Developing Methods of labeling Water Responsible production



Voluntary Action & Statutory Compliances Coexistence

Operating in weaker Regulatory & Enforcement Context

Large volume of data on water efficiency hibernates in the Statutory Compliance Statistics

HCC to complement collation & interpretation of such data

Prompt the actualization of existing statutory requirements for water consciousness (e g EIA & Environmental Audits) in the supply chain



Mitigate the Hurdles

- Limits on sphere of influence,
- Limits on quantitative data availability & authenticity, Stats in hibernation
- Overlap of statutory requirements and voluntary compliances
- Financial resources for engaging in promotion of Supply Chain Water management
- Vehicles of Collective Action: Active Federations & Council
- Professional Technical services dedicated to & specialized in water efficiency
- Developing a non-invasive, legitimate 'Water consumption labeling service'

Let's Begin:

Demonstrating Best Practice with Direct Action at HCC Supply Chain Mapping & Water Foot-printing Supported Advocacy

