



Science-Policy Panel
Chemicals, Waste and Pollution
Prevention



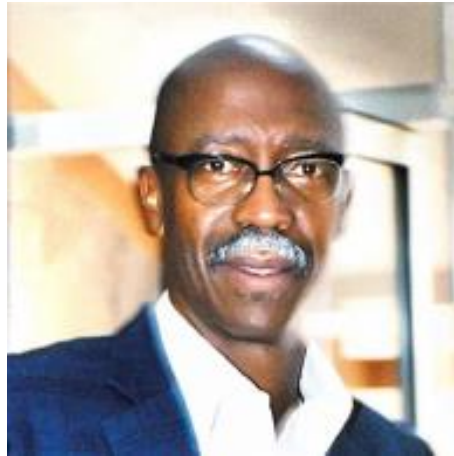
Deep-Dive Dialogues on the Options for Scope of the Science-Policy Panel

30 January 2023

Speakers



Valerie Hickey
World Bank



Santos Virgílio
Angola



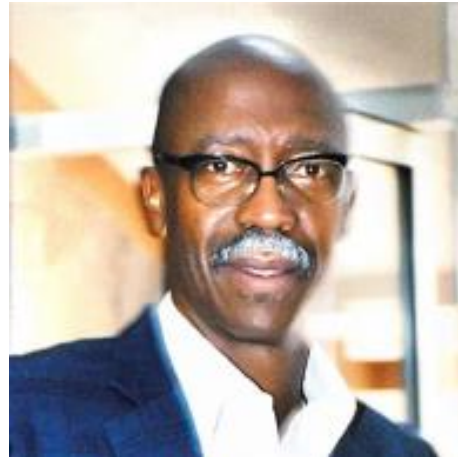
Ahmad Ansari
ZDHC



Martin Kayser
BASF



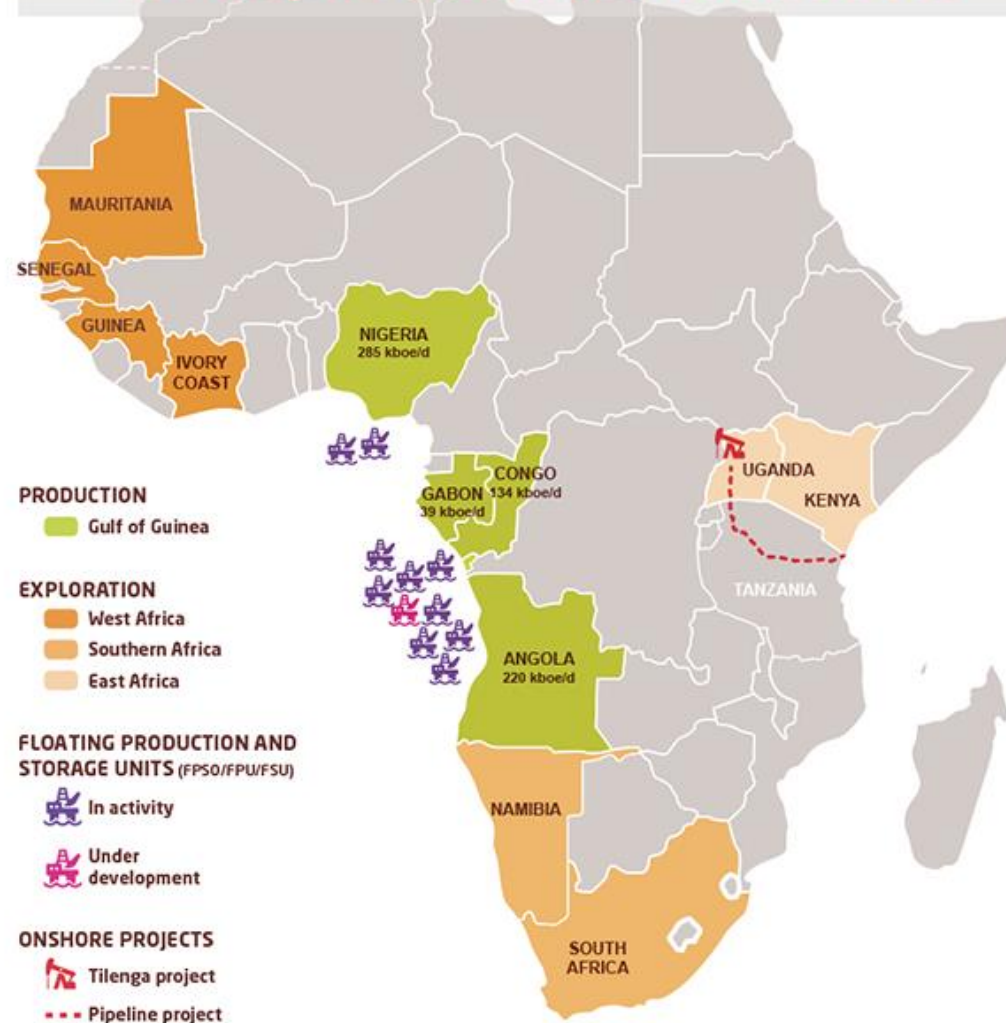
Valerie Hickey
World Bank



Santos Virgílio
Angola

Oil production in Africa

Key areas in sub-Saharan Africa for Exploration & Production



cartoon | IAGRI | cartoon | - cartoon | - February 2019

Proximity of oil fields



My thoughts on the scope of the panel

- ▶ Developing Countries are keen to see the SPP acting to bring EVIDENCES, proving that mismanagement of all chemicals, their waste, and all sort of pollution, have impact on human health and the environment, as well as socioeconomic impacts.
- ▶ We need to have global perspective, but have to take into account particular aspects relevant to developing countries, e.g., industrialization taking place in developing countries, which are observing the old standards ...
- ▶ SPP can Identify problems and ways of how they can be solved

My thoughts on the scope of the panel

- ▶ Strengthen collaboration among academia around the world, recognizing that in developing countries there are also some research taking place, whose impact is currently not considered enough
- ▶ The only way to achieve good results is somehow to involve the industry at different levels, providing data, making available expertise, putting independent financial resources, and the waste practitioners



Ahmad Ansari
ZDHC

Human Impact & SPP scope

How ZDHC manages it

How do chemicals & Waste impact us?

- Health: Workers, Consumers & Animals
- Pollution: Water, Air & Soil
- Environment & Biota
- Climate Change
- Loss of Biodiversity
- Issue with circularity
- Social & Economic dimension

Adverse Human Impact from chemicals & waste:

- Greenpeace
- River Blue (www.riverbluethemovie.eco)

Chemicals: Human Hazard end-points

- ❖ Toxicity (Dermal, Oral, Inhalation)
- ❖ Skin /Eye irritation

- ❖ Respiratory Sensitization
- ❖ Carcinogenic, Mutagenic, Reprotoxic

- ❖ Endocrine Disruptor
- ❖ Specific Target Organ Toxic
- ❖ Neurotoxic/Developmental toxin

- ❖ Persistent
- ❖ Bioaccumulative
- ❖ Toxic to Aquatic Life

MRS� risks in textile/leather chemicals

SL	CoC Group (MRS� Group)	Use	No. of Substances	Category of chemical	Health impact
1	Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	detergents, scouring, wetting, levelling agents, spinning oils, softeners, emulsifier/dispersing agents for dyes and prints, dyes and pigment preparations	4	Auxillaries and dyestuffs	Endocrine disruptors
2	Anti- Microbials & Biocides	Anti- bacterial finishes	3	Auxillaries	Toxicity
3	Chlorinated Paraffins	flame retardants, spin finishes, polymeric softeners	2	Auxillaries	CMR
4	Chlorobenzenes and Chlorotoluenes	carriers in polyester or wool/polyester dyeing; solvents; starting raw materials for disperse and vat dyes	2	Dyes and auxillaries	CMR
5	Chlorophenols	preservatives or pesticides	17	Auxillaries	CMR
6	Dyes – Azo (Forming Restricted Amines)	Disperse, Basic, Acid dyes	28	Dyes and Pigments	Bladder Cancer
7	Dyes – Carcinogenic or Equivalent Concern	Disperse, Basic and Acid dyes	15	Dyes	Carcinogenic
8	Dyes – Disperse (Sensitising)	Disperse dyes used in synthetic fibre (e.g. polyester, acetate, polyamide).	19	Dyes	Skin sensitising
9	Dyes – Navy Blue Colourant	Regulated. No longer should be used	2	Dyes	Carcinogenic
10	Flame Retardants	Flame retardant finish chemicals to meet flammability requirements in children's clothing and adult products.	30	Auxillaries (Specialty finishes)	Carcinogenic
11	Glycols / Glycol Ethers	solvents for finishing/ cleaning, printing agents, and degreasing or cleaning operations).	8	Auxillaries	CMR
12	Halogenated Solvents	finishing/ cleaning and printing agents, for dissolving/ diluting fats, oils and adhesives	5	Auxillaries	Ozone depletion, Cancer

SL	CoC Group	Use	No. of Substances	Category of chemical	Health impact
13	Organotin Compounds	antifoulants in marine paints, anti-odour finish, catalysts in plastic and glue production and heat stabilisers in plastics/rubber	11	Auxillaries	Endocrine disruptors
14	Other/ Miscellaneous Chemicals	chemicals/ substances/ process with a usage ban.	6	Auxillaries	
15	Perfluorinated and Polyfluorinated Chemicals (PFCs)	Water, oil and stain repellent agents. PFOA also may be in used in the production for polymers like PTFE	2	Auxillaries (Speciality material finishes)	vPvB, Teratogenic
16	Phthalates – including all other esters of ortho-phthalic acid	Compounds commonly added to plastics to increase flexibility. Used in panel printing to give flexibility to prints	18	Pigments, Auxillaries, basic chemicals	CMR and Endocrine Disruptors
17	Polycyclic Aromatic Hydrocarbons (PAHs)	Oil containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastics, lacquers, and coatings	18	Dyes	Carcinogenic
18	Total Heavy Metals	apply to dye and/or pigment formulations	14	Dyes and Basic chemicals	Neurotoxic, STOT
19	UV absorbers	These are frequently used in formulations to be stable to the influences of light and UV	4	Auxillaries	CMR
20	Volatile Organic Compounds (VOC)	They are associated with solvent-based processes like solvent-based polyurethane coatings and glues/ adhesives. They are used for any kind of facility cleaning or spot cleaning of stains from garments & fabrics	5	Auxillaries	Respiratory sensitizer and ozone depletion

Scope: Solution Approach

RSL Approach



Consumer

MRSL Approach



Environment



Workers



Consumer

Scope: LCA Framework as MUST

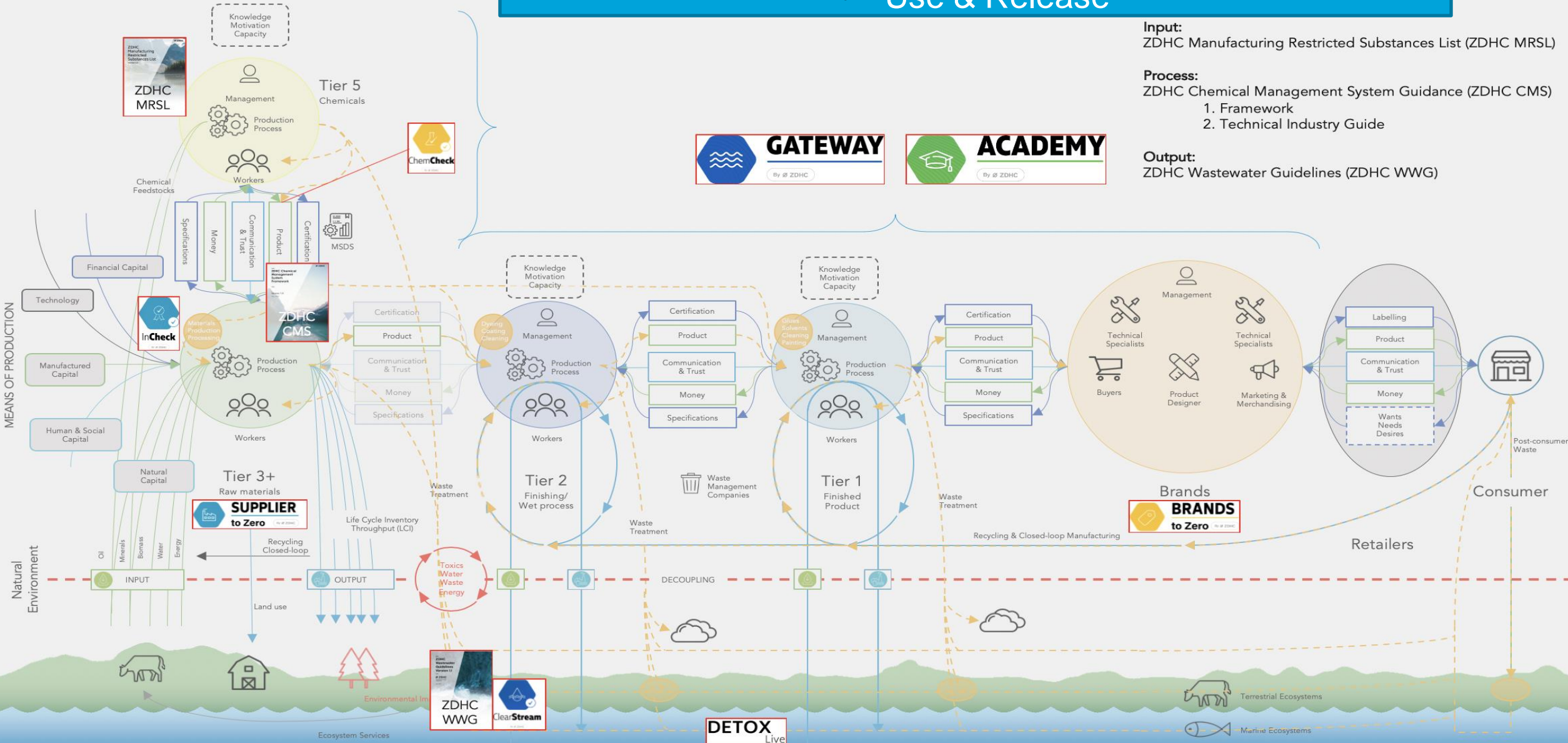
ZDHC Systems Map –

- Sector, facility & product levels
- Use & Release

Input:
ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)

Process:
ZDHC Chemical Management System Guidance (ZDHC CMS)
1. Framework
2. Technical Industry Guide

Output:
ZDHC Wastewater Guidelines (ZDHC WWG)



Input Chemical Management

A HOLISTIC APPROACH TO SUSTAINABLE CHEMICAL
MANAGEMENT - ZDHC MRSL

AT EACH FACILITY IN
CHEMICAL VALUE CHAIN

Guidelines



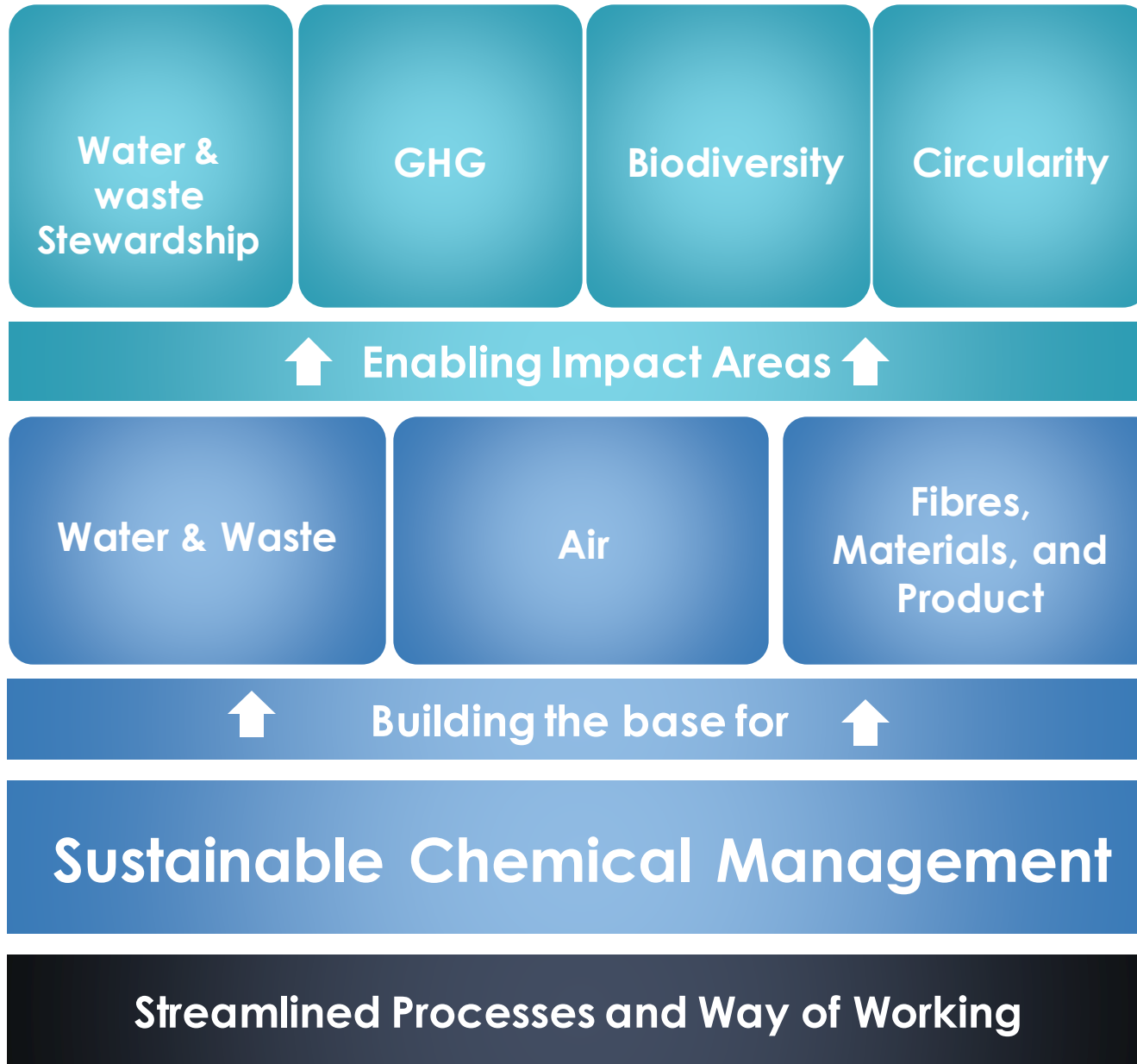
Tools

Database

The ZDHC Gateway Chemical Module
and Wastewater Module

Holistic thinking: Way Forward

HUMAN HEALTH & ECONOMIC WIN



ZDHC Competencies

ZDHC Core Competence

Science based
continuous
improvement

Positive Impact: Key Results



98% of manufacturing suppliers within our community had no detection of ZDHC MRSL restricted substances in their wastewater. Metals follow the same trend, leading to the conclusion that metals are not intentionally being used in the textile supply chain.



95% of PFAS listed on the ZDHC Wastewater Guidelines has been eliminated in facilities conducting wastewater testing.



Martin Kayser
BASF

Views on the Scope of the Panel

A strong Supporter

- **ICCA is a strong supporter of the concept of a Science Policy Panel for chemicals, waste, and pollution prevention and appreciates the opportunity to participate in these discussions**
- **SPP can elevate chemical, waste, and pollution issues within the global arena, providing relevant scientific assessments, information, and innovative policy recommendations to pressing environmental challenges**

Views on the Scope of the Panel

We agree with many other stakeholders that the panel should be broad, flexible, and include all facets of chemicals, waste and relevant pollution, including environmental pollution.

- **We think that the work should be integrative, with the opportunity to involve value chains, as necessary**
- **The goal of the panel will be to provide policy-relevant scientific evidence, so that countries can make educated decisions about issues in the space of chemicals, waste, and pollution**
- **Coordination with other MEAs and frameworks is imperative, to minimize duplication and conserve resources**

Engagement & Participation

- **As the manufacturers and processors of chemicals of all kinds, industry is well equipped to provide the panel with key scientific data and usage information to help the panel make recommendations grounded in sound science**
- **Within the OEWG meetings and any intersessional work, ICCA and our members look forward to providing ideas and solutions on how to utilize industry expertise**

- **ICCA looks forward to a constructive and collaborative OEWG scoping process, respecting and trusting each other, to help guide the OEWG in its development of the Science Policy Panel that can help us all better protect human health and the environment.**

Q&A

Thank you!