Mid-Term Review of the Core Support and Implementation Grant to Stichting ZDHC Foundation

Submitted to Laudes Foundation

FINAL REPORT | **10 DECEMBER 2020**
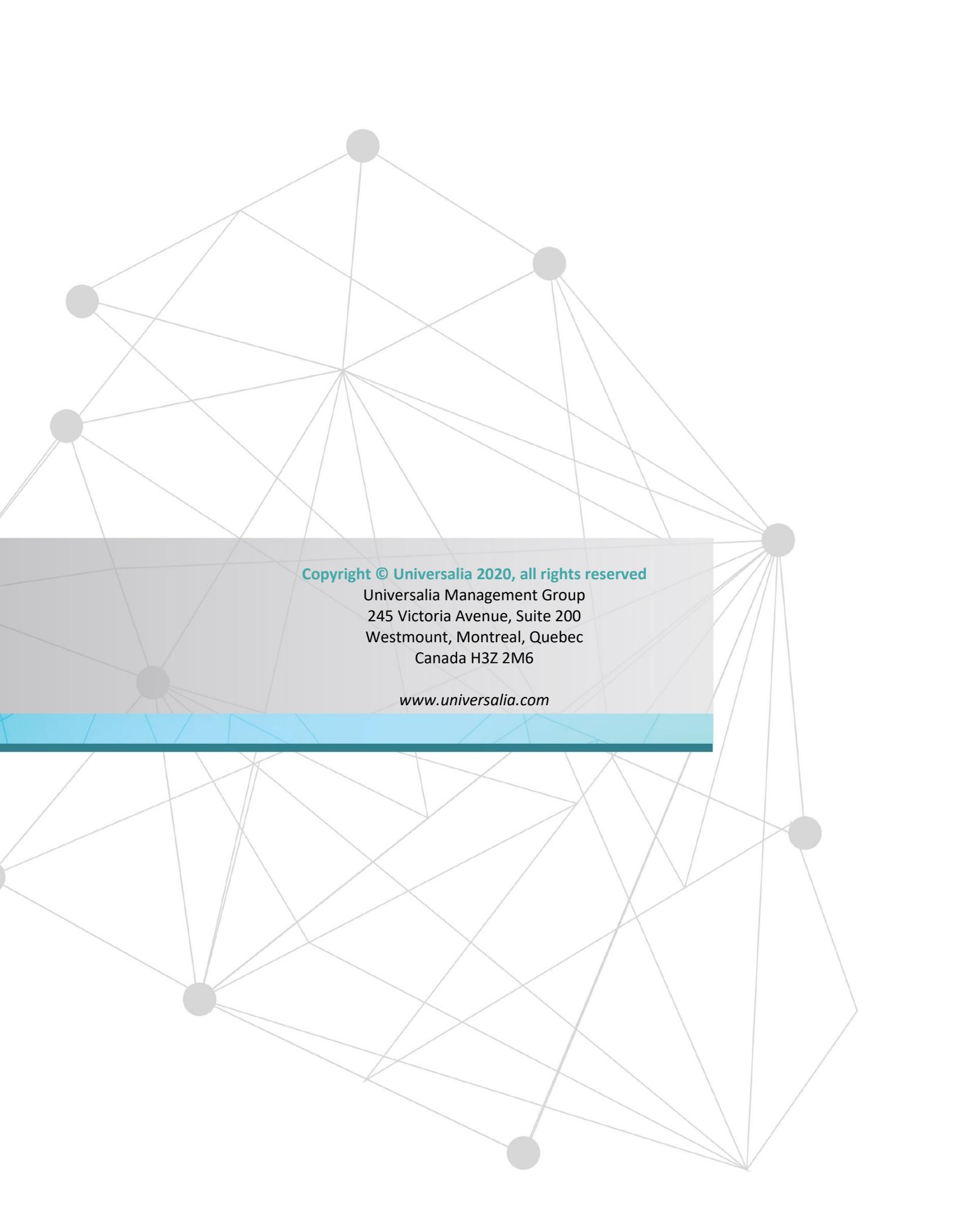
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Executive Summary

Background

Laudes Foundation commissioned Universalia to conduct an independent Mid-Term Review (MTR) of a core support grant to the Zero Discharge of Hazardous Chemicals Foundation (ZDHC). ZDHC is funded as part of what was at the time C&A Foundation's Circular Fashion Programme. The evaluation took place between July and November 2020.

The evaluation draws on document review and key informant interviews to assess the extent to which ZDHC has made progress against agreed objectives of the grant. It documents lessons learnt at the mid-point and provides recommendations for the second half of the grant cycle. It also generates insights for Laudes Foundation on the merits and drawbacks of substantial funding packages like this one to bring an organisation to effect system change within the fashion industry.

The four-year grant, ending in August 2022, was valued at €1.75 million. This amount represented about 12% of ZDHC's income and about 15% of programme expenses for 2018-2020.

Findings from this evaluation are presented and organised below as per Laudes Foundation's Rubric and Rating System (ERS) for Evaluating Initiatives, under the following headings: Context and Maturity, Design and Implementation, Precondition, Levers, Cross-Cutting Lenses, and Long-Term Value. Conclusions are summarised and are followed by recommendations, included in full.

Readers are invited to consult the report in its entirety.

Context and Maturity

Context

Two factors were considered in understanding the context in which ZDHC has evolved since 2018: the level of awareness around sustainability and the toxicity of chemicals, and the business landscape of the apparel and footwear industry. The first one has played in favour of ZDHC, as different industries have been under scrutiny for their environmental footprint, have been subjected to regulations, and have been trying to improve their performance. The second has made ZDHC's work more complex, as the apparel and footwear industry is highly scattered in its makeup. Together, these factors lead to a context that is considered neutral for ZDHC.

Maturity

The maturity of ZDHC is considered to be at level three, "consolidating", at the mid-term. At the beginning of the grant it was closer to level two, "developing." Today, most things run smoothly and ZDHC is refining its systems, processes, and performance, as well as honing its approach to triaging and harnessing new ideas to remain true to its vision and mission.

Design and Implementation

Right Design

The grant has targeted the right organisation at an opportune time for systemic impact. Grant design is geared to accelerating final assembly, launch, refinement and scale up of ZDHC's holistic programme. The grant presents a combination of

high yield activities (e.g. relationship building, incentivisation across the supply chain) and those that are yet to show yields, but all are relevant and showing developments that are supportive to programme outcomes. Regarding the modality of the grant, there is an inconsistency between its "core support" designation and the use of a programme log frame with outcome related deliverables.

Alignment

Partly Conducive

Grant activities align substantially to ZDHC Priority Resource Areas in its Strategic Growth plan. By contrast, alignment of the grant design to the strategies of the Circular Fashion Programme hangs on a strand of activities that are of secondary importance to ZDHC. Today, alignment in relation to Laudes Foundation's current strategic direction is even less assured.

Good Implementation

Conducive

Grant activities build on the results of previous grants. Implementation compares favourably to the grant's indicative spending plan, though in some instances, results targets associated with that spending are unrealistic. Quality personnel have been brought into strategic roles, though in-house chemicals expertise remains at a premium. Constraints in grant implementation are largely synonymous to those for ZDHC as a whole; most pertain to the handling of the COVID-19 pandemic.

Proper Monitoring and Adaptive Management

Partly Conducive

Grant data collection and reporting is appropriately referenced to output and outcome targets, and narrative accounts are rich with intent to back results claims with evidence. However, the grant "results story" as described in the end of year monitoring reports is obscured by a narrow referencing to the grant agreement's disbursement schedule and by discontinuities in the results log frame.

Good Communication

Partly Conducive

Dedicated staffing for grant reporting has been instrumental to the development of board reporting and to the widely disseminated ZDHC Impact Report. Grant resources have also been ploughed into a publication targeted at audiences associated with the fashion supply chain and potentially able to influence detox related commitments. The largest constraint on good communication has been the availability of quality data.

Precondition

Changing the Narrative

Conducive

In the context of chemical management, ZDHC has successfully continued work to convert a competitive apparel and footwear industry into a collaborative one, increasingly articulated around the ZDHC vision.

Efforts to transition from using less to more sustainable chemical management practices have so far been foundational more than transformational.

Partly Conducive

Levers

Business Model

Unconducive → Partly Conducive

As compared to 2018, there is greater willingness today in the supply chain to invest time and money in better chemistry. The Gateway modules are used, well regarded and thought to be improving with continuing refinements. A new more demanding Leader Programme is rolling out for brands, manufacturers and now chemical suppliers. By design, these are meant to incentivise better chemical management, procurement choices, and market positioning along the supply chain, all informed by a reliable flow of facility and chemicals data. Signals are promising from this systems approach, but conclusive evidence of the

business case for the Roadmap to Zero Programme remains to be secured.

Innovation
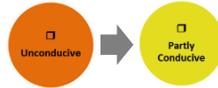
ZDHC's innovation agenda exceeds what the organisation has been able to address till now, creating a backlog of needs and opportunities. Grant supported pilots have yielded useful results in the form of industry guidelines and new production technologies, and they underline the benefits that can accrue in pre-competitive, multistakeholder processes. Meanwhile, ZDHC-led conversations to contextualise circularity in the chemical management domain are starting but, as yet, without a pathway toward the expected outcome of "industry uptake."

Transparency

ZDHC has made significant progress improving transparency within the apparel supply chain. To date, however, accountability practices have not been sufficient to drive better chemistry. ZDHC is in a good position to promote and enable consumer-facing transparency, but efforts in this area are in formation at the mid-term.

Cross-Cutting Lenses

Organisational and Network Effectiveness

Over the course of the grant, ZDHC has continued consolidating its organisational and governance structure, developed its body of policies, and somewhat built its operational capacity, including delivery of services to support users. Despite some notable improvements, Monitoring and Evaluation (M&E), and to some extent communications, remain a challenge for ZDHC.

Convening and Collaboration

Fundamentally, ZDHC is a convener. It has successfully increased its numbers of users, deepened and widened its geographical reach, enhanced convergence, and convinced chemical suppliers to get on board. The organisation has cast a wide net in its engagement with stakeholders, which has placed constraints on pace and level of ambition. The upcoming Leader Programmes are expected to counter this trend.

Long-Term Value

Environmental Sustainability

The grant has helped ZDHC in setting up the systems and processes necessary to increase and promote environmental sustainability by minimising the adverse impacts of toxic chemicals on the environment. Hurdles standing in the way of environmental sustainability are: tracking stakeholder compliance with standards, ensuring that compliant supply chain actors are rewarded by the market, and certifying suppliers in accordance with existing regulations.

Financial Sustainability

ZDHC's financial growth has been steady since 2016. An increasingly pronounced revenue mix of brand memberships and service transaction fees make ZDHC more resilient than it was at the grant's outset. A COVID-19 racked economy notwithstanding, prospects for growth are strong with a shared vision, a fully assembled business model, an array of support services on the ready, and strategic and cost/efficiency conscious collaborations in development.

Scale-Up

ZDHC is on the correct trajectory to contribute to wider system shifts. Its systems and processes are designed to scale, and it has begun expanding both into new regions and deeper into the supply chain. With a focus to date on business model assembly and refinement, brand recruitment necessary for scale-up has taken a back seat.

Conclusions and Recommendations

Two years into the Laudes Foundation core support grant to ZDHC, the MTR describes a mostly good news story. At the mid-term, ZDHC is showing acceleration and scalability on its sustainable chemistry mission. Strengthened by the increased presence of in-house expertise and by more focused, inclusive and geographically distributed working teams, ZDHC is enabling the apparel and footwear industry to implement chemical management best practice and advance toward zero discharge of hazardous chemicals.

ZDHC is making these strides through a concerted engagement with actors along their industry supply chains, coalescing around a unitary chemical management system, and through an array of enabling collaborations with industry associations, non-state actors pursuing sustainability mandates and, to a lesser extent regulators. It has, or will have in a matter of months, the guidelines, tools and supports, as well as the programming in place to scale up. Innovations, including an exploration of chemical circularity and new transparency and tracing technologies, are poised to give additional impetus to this change. It is a palpable moment wherein efforts hitherto concentrated on assembly and early use can finally give way to full-on implementation and systems change as envisaged in the grant design. What ZDHC is challenged by, and can address most properly as implementation scales up, is the assurance of a business case.

Design and Implementation

Recommendation 1: To reconcile the less restrictive "core support" designation of this grant with the use of a more restrictive, programme focused accountability framework, Laudes Foundation and ZDHC should establish a fresh amendment delineating the best possible focusing of grant resources for the remaining two years, agreeing on a reporting framework that allows ZDHC to document: a) grant supported activities and results that are within the sphere of influence of the grant to produce; b) contributions made with grant resources toward the Priority Resource Areas in the ZDHC Strategic Growth plan.

Recommendation 2: Laudes Foundation and ZDHC set the amendment discussion outlined in Recommendation 1 within the context of an exit strategy, wherein there is: clarity on intent to exit the partnership, a discussion of ZDHC's strategic need for grant funding, post 2022, to support its onward trajectory toward organisational and financial sustainability, and agreement on steps to be taken by Laudes Foundation and ZDHC over the coming two years to position the latter for a smooth transition.

Recommendation 3: With an amended agreement in place, ZDHC review its grant management arrangements with a view to: a) enhancing manager level inclusion in decision-making; and b) scope for adaptive management practice in grant utilisation.

Intermediate Outcomes

Recommendation 4: It is critical that the Leader Programmes be fully rolled out and that this leads to industry actors making and upholding commitments to safer chemistry. Procurement practices in the supply chain should be monitored. Incentives should be considered to increase the likelihood that compliant actors are rewarded by the market. This will avoid ZDHC playing, or being perceived to play, to the lowest common denominator of interests pertaining to sustainability.

Recommendation 5: A summit of accepted certifying bodies should be called by ZDHC to identify issues, opportunities and solutions related to assessing MRSL conformance. In preparation for such, ZDHC should gather issues from key stakeholders and build an agenda accordingly. The meeting should be led externally by a trusted, skilled, subject-knowledgeable facilitator. There should be a focus on issue resolution with appropriate documentation.

Recommendation 6: Once the assembly of the ZDHC business model for sustainability is complete and fully operational, ZDHC should repeat the business case study in a bid to demonstrate the business case for industry stakeholders engaging in the ZDHC Programme to remove hazardous chemicals from the supply chain. This study should be done externally and adapted from the original investigation.

Recommendation 7: Drawing on its pre-competitive, multistakeholder engagement experiences to date, ZDHC should position itself with a new innovation mechanism to expedite the chemical substitution process and facilitate the entry of new processes and guidelines that support chemical management best practices. Courses of action suggested for ZDHC are consistent with the two studies noted above and can be summed up as follows: a) Triage the candidate list for the best combination of high impact and good prospect substitutions; b) Pose challenges – make calls for innovations and research; c) Convene multistakeholder working groups to review options; and d) Bring the most scalable options into the supply chain.

Recommendation 8: Having now initiated a discussion among stakeholders with its circularity study, ZDHC assess: a) what activities and deliverables are required to operationalize the areas of work identified as points of convergence with the Roadmap to Zero programme, and b) which stakeholder organizations should be engaged in the effort and how in order to engender uptake of the roadmap by industry as per the relevant grant outcome. This exercise should be done with a reference to recommendation 1, so as

to ensure that the work set out in this planning exercise is appropriately integrated within the amended agreement with Laudes Foundation.

Recommendation 9: Efforts enabling greater transparency in the supply chain and with consumers should increase progressively as the grant progresses, as per the relevant anticipated outcome. ZDHC will need to refine its processes in this regard, steward its contributors in their journey towards transparency, and provide incentives to optimise uptake.

Recommendation 10: ZDHC should continue its transition towards becoming a formally structured organisation, with more demarcation of roles and responsibilities among teams and clear identification of contact persons on different topics.

Recommendation 11: The division of tasks between advisory groups and the ZDHC team should be reviewed for optimal performance. This may require that ZDHC produces the outputs itself, under the direction of the groups. It would be important to preserve the advisory group members' sense of ownership over outputs. For this more proactive stance, ZDHC would need to increase its chemistry competencies and bandwidth.

Recommendation 12: ZDHC should review its communication strategy so as to clearly represent and socialise the organisation's overall vision to stakeholders, both internally and externally. This would clarify expectations and contribute to increased effectiveness and efficiency.

Recommendation 13: ZDHC's M&E system needs refinement. In particular, data should be contextualised so that it shows progress in relation to global market parameters and/or to aspirational goals. Covid-19 fall out across the supply chain should be tracked and reported on with a view to learning about supply chain resilience. Improvements could take the form of a dashboard mechanism for high level KPI data as per the Strategic Growth plan, a data feed of ZDHC's global market presence, operational research studies related to the functioning of the Roadmap to Zero Programme (e.g. monitoring the impact of service

pricing on industry users of the Gateway). The methodology used to obtain and aggregate data used for claims around chemical management should be reviewed and clarified, so as to spur trust.

Recommendation 14: ZDHC should ensure that its driving force remains the brands, as they have the responsibility and the characteristics necessary to drive behavioural change across the supply chain. At the same time, in a dynamic systems change process such as this, the board and the Roadmap to Zero Programme should continually strive to have an adequate multistakeholder set up which allows for a pooling of expertise and shared ownership over the programme. Similarly, ZDHC should continually assess how NGOs and other professional bodies should best contribute to the programme through their expertise and of their capacity to encourage ambitious progress. The distribution of roles should be communicated to key stakeholders to ensure a shared understanding.

Long-Term Value

Recommendation 15: In order to reinforce ZDHC's status as a one-stop-shop and increase usability, it should find a way to certify only suppliers that meet existing regulations, e.g. regional and national standards.

Recommendation 16: Further convergence, geographic expansion, capacity development, and translation of important documents are warranted for ZDHC to increase the size of its ecosystem as well as its attraction to industry actors. The collaboration with the SAC, Textile Exchange and the AII could be leveraged for this purpose.

Recommendation 17: In order to increase ZDHC's scale, and thus effect system shifts, an augmentation of its number of contributors is warranted. ZDHC will need to assess any impetus to chart new programming directions that may come through this expansion, and ensure that any new venture brings net strategic value and builds on ZDHC's core competencies.

Abbreviations

AFIRM	Apparel and Footwear International RSL Management
AII	Apparel Impact Institute
DMF	Dimethylformamide
ERS	Rubric and Rating System
EU	European Union
GC3	Green Chemistry and Commerce Council
IPE	Institute of Public & Environmental Affairs
KPI	Key Performance Indicator
M&E	Monitoring and Evaluation
MMCF	Man-made cellulosic fibre
MRSL	Manufacturing Restricted Substances List
MTR	Mid-Term Review
NGO	Non-governmental Organisation
OAR	Open Apparel Registry
OIA	Outdoors Industry Association
PRA	Priority Resource Area
REACH	Regulation Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RSL	Restricted Substance List
SDG	Sustainable Development Goal
ToR	Terms of Reference
ZDHC	Zero Discharge of Hazardous Chemicals Foundation

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Appendices

1. Introduction

Universalia is pleased to submit this report of the independent Mid-Term Review (MTR) of a core support grant to the Zero Discharge of Hazardous Chemicals Foundation (ZDHC) to Laudes Foundation. Laudes Foundation (named C&A Foundation at the time) provided support in the form of a grant to ZDHC under its Circular Fashion Programme. The Programme is committed to increasing the development and implementation of business models that result in a positive net impact on ecology, economy and people.

The MTR assesses the extent to which and how ZDHC has made progress against the agreed intended objectives of the grant. It documents any lessons learnt at the mid-point and provides recommendations for the second half of the grant cycle. At the same time, the MTR generates insights for Laudes Foundation on the merits and drawbacks of substantial funding packages like this one aimed at building identified capacities to bring an organisation to effect system change within the fashion industry.

ZDHC's funding relationship with Laudes Foundation dates back to December 2016 and is composed of four grants: one dedicated to the development of the ZDHC Facility Discharge Registry (€470,000), the second contributed to the design and launch of the ZDHC MRSL Performance In-Check module (€275,000), the third allowed for ZDHC's strategic planning process (€110,000), and the fourth as core support. The latter was attributed to ZDHC in 2018, for a value of €1.75 million and a duration of four years. This grant has represented about 12% of ZDHC's income and about 15% of programme expenses over the first two years of its cycle. Grant documents present activities organised in four interconnected workstreams: a) demonstrate the enabling role of chemistry; b) strengthen organisational capacity; c) deepen geographical reach and implementation support; and d) drive continuous improvement.

> ### Key Definitions[1]
>
> Green Chemistry: Design of chemical products and processes that reduce or eliminate the generation of hazardous substances. Design-oriented field.
>
> Safer Chemistry: Substitution of harmful chemicals with less harmful ones. Alternatives assessment, evaluation of alternatives to chemicals of concern.
>
> Screened Chemistry: Concept of identifying safer alternatives whilst eliminating hazardous chemicals.
>
> Sustainable Chemistry: Design and use of chemicals that are less damageable through their lifecycle. Relates to a broader ecosystem beyond science that includes education, economics, policies, management and other efforts that enable the science to be implemented and to make a positive impact.

Grant supported activities were expected to show results against the following outcomes:

1) Reduction and removal (phase out) of hazardous chemicals use, and uptake of safer and innovative alternatives in the Industry supply chains;

2) Uptake of a practical circularity roadmap by the Industry on chemicals research needs, innovative chemistry solutions and applicability of new business models;

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[1] Sources: United States Environmental Protection Agency (2020) *Green Chemistry*. Available at: https://www.epa.gov/greenchemistry
ZDHC (2019) *ZDHC Brands Converge their Screened Chemistry Programmes*. Available at: https://www.roadmaptozero.com/post/zdhc-brands-converge-their-screened-chemistry-programmes-2
Exchanges with the Review Team's independent, external expert advisor, Dr Joel Tickner

3) Increase in the number and type of innovation pilots and related investments made to bring safer and innovative chemicals/ process/ technology alternatives to scale;

4) Increase in the convergence of chemical management frameworks and a harmonised implementation by brands;

5) ZDHC serves as the Industry's central platform for improved decision-making and performance throughout the chemical management process; and

6) Uptake of a consumer communication framework by the Industry that contains chemicals information aligned with ZDHC.

Report findings are organised under the following groups of criteria, as per the Laudes Foundation's Rubric and Rating System (ERS) for Evaluating Initiatives.

- Chapter 3: Context and Maturity

- Chapter 4: Design and Implementation

- Chapter 5: Precondition

- Chapter 6: Levers

- Chapter 7: Cross-Cutting Lenses

- Chapter 8: Long-Term Value

- Chapter 9: Conclusions and recommendations, including lessons learnt

Chapter 2 provides an overview of the MTR's methodology. A series of Appendices provide additional supporting materials to the analysis and recommendations.

2. Review Methodology

This chapter summarises the methodology used in the MTR. It reiterates the objectives from the MTR Terms of Reference (ToR), highlighting: scope and design; tasks associated with data collection, analysis, and reporting; and limitations faced in carrying out the review. The MTR design is set out in full in **Appendix III**.

2.1   Objectives

Informed by the ToR (see **Appendix XIV**) and aligned with discussions with ZDHC staff and stakeholders, the MTR's objectives were to:

- Review the value addition of the core support grant to ZDHC for organisational effectiveness to date; and, in particular, to assess: a) The strategy, approach and design implemented to achieve grant outcomes; b) External and internal factors in design and implementation that have contributed to or impeded achievement of grant outcomes;

- Examine the quality of the design and implementation of the grant, the preconditions (identified) and the levers used in the grant to achieve intended outcomes;

- Assess the interim results, potential for sustainability and scalability of the grant, till date;

- Examine mid-term performance and results of the implementation aspects of the grant, as well as suggest adjustments to measurement indicators, if needed; and

- Distil actionable and strategic recommendations and lessons for the remaining time in the grant.

2.2   Design

Universalia designed the MTR to be consistent with the Laudes Foundation's ERS, currently being piloted. For this purpose, the MTR team prepared an adapted Review Matrix (see **Appendix IV**) to structure and guide data collection and analysis for this assignment, based on the criteria defined by the ERS. The ERS sets out three dimensions of inquiry as well as six groups of criteria distributed across these dimensions. **Table 2.1** below shows those criteria assessed by the MTR Team as relevant to this mandate (i.e., 14 out 21 listed in the full collection of ERS criteria). Two additional dimensions are featured in the ERS: an assessment of *programme maturity* and of *context difficulty*.

Table 2.1: Criteria to be Applied in Assessing Performance

INITIATIVE QUALITY
A.   Design & Implementation
Right design to address important needs, strengthen organisations & networks, & influence policies, legislation and industry narratives
Alignment with CA&F's strategies & partners' strengths.
Good implementation: Inclusive, enabling, empowering, capacity enhancing implementation approach.
Proper monitoring and adaptive management to ensure sound decision making
Good communication to promote internal & external collective learning

INTERMEDIATE OUTCOMES
B.   Precondition
<u>Changing the narrative:</u> Influencing mental models, beliefs and assumptions in ways that support the desired change
C.   Levers
<u>Transparency:</u> Disclosure of data which enables constituents to hold decision makers to account
<u>Innovation:</u> The implementation of creative, imaginative ideas –including technologies – to solve industry challenges
<u>Business Models:</u> Alternative business models promoting an inclusive and regenerative economy
D.   Cross-Cutting Lenses
<u>Organisational & network effectiveness:</u> Organisations & networks with the right ability to produce relevant outcomes
<u>Convening & Collaboration</u> in powerful and transformative ways towards meaningful industry change

LONG-TERM VALUE
E.   Impacts & Sustainability
<u>Environmentally sustainable</u> business models & practices
<u>Financial</u> sustainability
F.   Scalability
<u>Scale-up:</u> Practical viability at larger scale

Source: Comea Relevant Evaluations and Real Evaluation (2019) *C&A Foundation's Evaluation Rubric & Rating System (ERS) for Evaluating Initiatives: A Guideline for Field Testing* (Revised Draft)

The Review Matrix organises the key questions from the ToR under these criteria and provides sub-questions for each. The questions, sub-questions, intended results, baseline, indicators, and data sources are presented in full in **Appendix IV**.

To address the different questions and provide ratings, the Review Team drew on the following forms of inquiry: **theory based** – on the causality that links grant activities and results; **contribution analysis** – on the added value to ZDHC performance traceable to the grant; **contextual and stakeholder analysis** – on relevant factors in the ecosystem within which ZDHC operates; **content analysis** – on trends and patterns for each criterion of the rubric; **institutional/organisational analysis** – on ZDHC's functions and perspectives for scalability and sustainability; and **cost-effectiveness analysis** – on the utilisation of grant resources to support ZDHC.

2.3   Data Collection

The MTR team used document review and semi-structured interviews to address the Review Matrix. A list of documents reviewed is set out in **Appendix VI**. Virtual semi-structured interviews were conducted in September and October 2020 with 38 key informants from across several stakeholder groups (see **Appendix V**). Of these stakeholders, five are current and two are former ZDHC board members.

2.4 Analysis and Reporting

Analysis and reporting are structured as per Laudes Foundation's ERS. In addition to answering the review questions presented in the Review Matrix, the MTR Team used the ERS to assess the grant's overall performance, so far, and bring forward insights to guide implementation from this point until the closure of the grant in 2022. For each of the selected criteria, the MTR provides a rating on a five-point scale, as laid out in **Figure 2.1**. The ERS field guide provides a tailored set of descriptors for each criterion. The Initiative Quality dimension is assessed with one rating per criterion. The criteria related to Intermediate Outcomes and Long-Term Value display a transition from *pre-existing* to *current* state. The ratings reflect an assessment of the grant's progress from baseline conditions toward intended outcomes.

Figure 2.1: 5-Point Rating System
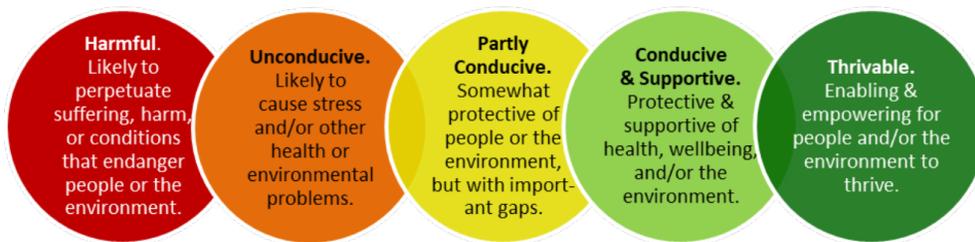
In addition to the five-point rating system, the ERS provides a rubric with which to delineate contextual factors and programme maturity factors. The former is addressed at the bottom of the Review Matrix and is set out in **Figure 2.2.**

Figure 2.2: Context Difficulty Minirubric

The MTR Team analysed institutional and organisational aspects that support ZDHC's capacity to deliver on its Roadmap to Zero Programme. There are sub- questions in the Review Matrix that explore these aspects. On the strength of this analysis, the team made an assessment of programme maturity using the minirubric in **Figure 2.3** below.

Figure 2.3: Programme Maturity Minirubric

Recently started, still working to get its basic systems, processes, and personnel in place.	Basics in place but still concentrating on making things work smoothly.	Most things running smoothly and is refining its systems, processes, and performance.	Up and running project, running smoothly, and working on continuous improvement.
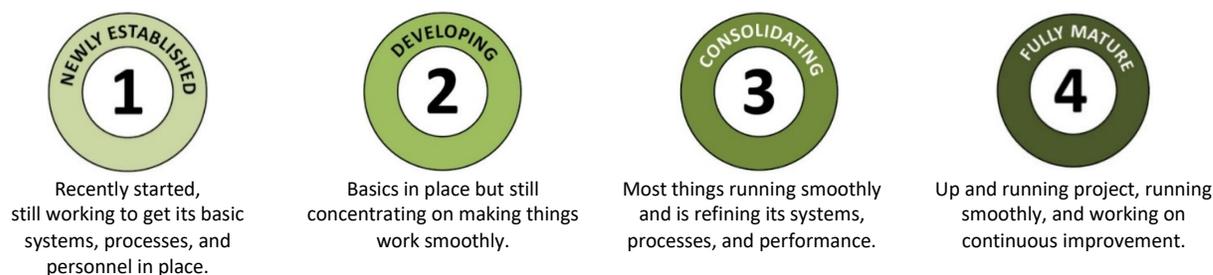
Using the qualitative analysis platform Dedoose, the team organised the data collected to the different criteria of the ERS. This enabled a rapid triangulation of data sources by key question. On the basis of this analysis, the team prepared a preliminary findings workshop that included key ZDHC and Laudes Foundation staff. The ratings for the whole rubric are presented in **Appendix VII**.

2.5   Limitations

Three factors have constrained the team in addressing the MTR ToR. All are notable but none were significant enough to compromise MTR findings and the development of conclusions and recommendations.

- All interactions associated with the MTR were carried out remotely, eliminating the scope for "incidental" knowledge gathering that comes from observation and unstructured interaction.

- Many key informants had limited knowledge of the grant itself and its specific contribution. This was not a substantial barrier, as most respondents were able to address evaluation questions pertaining to the organisation as a whole and/or its programme performance. Questions relating to design and implementation of the grant were addressed with informants who were familiar with the grant. Information from these more narrowly scoped interviews was corroborated in a review of grant related documents. Commentary on grant design and implementation is taken up under **Section 4.3**.

- While significant as a grant, the amount of money involved represents a modest proportion of the total operating budget of ZDHC; this made it challenging to show the grant's contribution to the ZDHC outcomes assigned to it.

3. Context and Maturity

Anchored in the ERS, this section looks into two factors that affect the outcomes of the grant: the context in which the partner operates, *from challenging to favourable*, and the maturity of the initiative, referring to *how consolidated and developed it is*. Ratings for both factors are presented in **Table 3.1** below and then discussed.

Table 3.1: Overall Ratings – Context and Maturity

Context minirubric	
Context in which the ZDHC initiative evolves	
Maturity minirubric	
Maturity level of the initiative	

3.1 Context

Two factors were considered in understanding the context in which ZDHC has evolved over the last two years. One is about existing efforts around sustainability and the toxicity of chemicals, and the second relates to the business landscape of the apparel and footwear industry.[2]

In the context of widespread sensitisation on the issue of climate change, different industries have been under scrutiny for their environmental footprint. Nearly ten years ago, Greenpeace revealed poor performance in the apparel and footwear industry with its campaign, Detox my Fashion. The campaign shifted apparel and footwear brands' focus from the toxicity of products for consumer use to the toxicity of chemicals used to make these products. This new-found awareness on the toxicity of chemicals in the industry then trickled down the supply chain, as brands turned to their chemical suppliers. As a result of Greenpeace's campaign, leading brands committed to eliminating their discharge of hazardous chemicals by 2020 and they created ZDHC. Due to the campaign and to ZDHC's work since its founding in 2011, the toxicity of chemicals has become an important business consideration for a significant part of the apparel and footwear industry.

In the meantime, various initiatives and regulations were launched around chemical management, which brought further attention to the topic and encouraged ZDHC to improve both the quality and the pace of its work. Examples include the Sustainable Apparel Coalition (SAC) and its Higg Index, the Institute of Public & Environmental Affairs (IPE) and its work to monitor and disclose wastewater contamination in China, and

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[2] These factors were deemed applicable and relevant to the situation of ZDHC and to the grant itself, as opposed to the factors suggested in the ERS (geography and climate, cultural norms, etc.).

the European Union's (EU) regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Brands have made additional related environmental commitments, prior to and following Detox my Fashion. Initiatives like the Fashion Industry Charter for Climate Action, and CanopyStyle focused on the use of Ancient and Endangered Forests in viscose and other cellulosic fabrics have simultaneously competed for brand attention and given further impetus to take action on sustainable chemistry.

In large part, ZDHC operates in a world of fast fashion where clothing designs move quickly from the catwalk to stores to meet new trends. Here, highly competitive pricing puts pressure on supply chains to produce volume at low cost. Supply chain actors – manufacturers, chemical suppliers, dyers, etc. – are large in number and diverse in make-up. They are spread across all continents operating under a variety of regulatory conditions. These actors are divergent in their interests, levels of knowledge related to safer chemistry, risk appetite, and readiness to address chemical management and to adjust their practices in this regard. In a business environment subject to multiple standards and certification schemes, a segment of industry stakeholders along the supply chain recognises the need to take collective action against toxic chemicals to overcome the prevailing confusion and wasteful duplication of effort.

The current COVID-19 pandemic is a source of uncertainty for apparel and footwear industry actors. In the short term, sustainability teams within brands are vulnerable to furloughing. In the longer run, brands and their supply chains face reviews to their ways of functioning. As a consequence of the pandemic, ZDHC foresees a reduction in revenue for 2021, along with some erosion in the level of priority assigned to it. To date, however, stakeholder engagement in ZDHC from the different supply chain actors remains largely unaffected.

Overall, the context for ZDHC is neutral and should remain so to the extent that the organisation can succinctly tie the narrative of toxic chemistry in fashion to the narrative of climate change. This link is implicit in the discourse among supply chain stakeholders; continued branding efforts will be required to assert ZDHC's positioning in this regard. If chemical management is not clearly presented as a facet of the fight against climate change, informants warn that ZDHC's efforts could be obscured by the larger climate change discourse.

3.2 Maturity

ZDHC was founded in 2011 and in 2015 it was established as a standalone legal entity: it underwent a major organisational transformation as it became a foundation, welcomed new leadership and established its first board of directors. Over the past five years, it has made progress towards establishing its practices and policies, rapidly transitioning from a brand-led start-up to a more formally structured multistakeholder initiative. Successive Laudes Foundation grants have supported ZDHC in its maturation, in two instances by helping to build key elements of the Roadmap to Zero toolbox and in one instance by helping the organisation to craft a Strategic Growth plan.

In 2018, when the core support funding began, ZDHC had its programming tools mostly in place but was concentrating on consolidating them while also improving its service offering to contributors (brands, manufacturers, chemical suppliers, associates, etc.) and strengthening its governance and operations. Since then, ZDHC has made considerable strides on all three counts and it is coming towards the close of its transition in terms of organisation and governance. The grant is designed to further assist the organisation in this multifaceted transition.

At the mid-term, ZDHC is assessed to have reached maturity level three, "consolidating." At the beginning of the grant, it was closer to level two, "developing." Today, most things run smoothly and ZDHC is refining its systems, processes, and performance. The organisation has a clear understanding of the impact it wants to have. It is still refining the way it responds to diverse and competing interests among contributors, balancing democratic decision-making, on the one hand, with the need to spur change in the apparel and footwear industry, on the other. At this stage, ZDHC is honing its approach to triaging and harnessing new ideas in a bid to meet the needs of its stakeholders while also remaining true to its vision and mission.

The findings discussed below are to be understood in light of ZDHC's current status on this maturity scale.

4.   Design and Implementation

This section assesses the design elements of Laudes Foundation core grant and the way it has been implemented to the mid-point in the four-year grant cycle.

Table 4.1: Overall Ratings – Design and Implementation
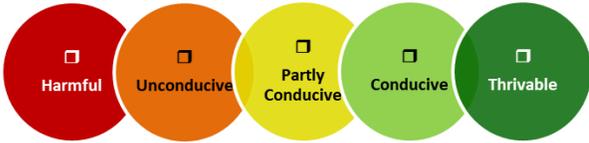
	Harmful	Unconducive	Partly Conducive	Conducive	Thrivable
A.1 Right design to address important needs, strengthen organisations & networks, & influence policies, legislation and industry narratives				Conducive	
A.2 Alignment with Laudes Foundation's strategies & partners' strengths			Partly Conducive		
A.3 Good implementation: Inclusive, enabling, empowering, capacity enhancing implementation approach				Conducive	
A.4 Proper monitoring and adaptive management to ensure sound decision making			Partly Conducive		
A.5 Good communication of the initiative to promote internal & external collective learning.			Partly Conducive		

4.1   Right Design

Finding 1:   **For systemic impact, the grant has targeted the right organisation at an opportune time. Grant design is geared to accelerating final assembly, launch, refinement and scale up of ZDHC's holistic programme. High yield activities support relationship building and incentivisation across the supply chain, convergence around a unitary Manufacturing Restricted Substance List (MRSL), geographic expansion toward production countries and the development of enabling supports. At the mid-point, several activities are yet to show yields, but all are relevant and showing developments that are supportive to programme outcomes. Regarding the modality of the grant, there is an inconsistency between its "core support" designation and the use of a programme log frame with outcome related deliverables. One consequence of ZDHC's commitment to a logframe is a reduced scope for adaptive management, a feature normally valued in a core support mechanism.**

4.1.1   *Intention*

Conducive

In its 2018 grant design document, ZDHC positions itself as an industry leader, "working to eliminate hazardous chemical discharge in manufacturing processes that cause harm

to people and the planet." The foundation names as a strength its ability "to leverage chemical management expertise from brands, retailers, facilities, chemical manufacturers, NGOs and governments to affect systemic change across the industry." At the time of writing the grant, ZDHC reports having in place many of the "collaborations, standards, tools and implementation guidance under its Roadmap to Zero Programme, for use by industry stakeholders" but a shortage of human capital and financial resources to bring the systems change it seeks to scale.

4.1.2   *Grant Design*

Two years into the grant, ZDHC is widely considered the "go to" organisation to define and drive safer chemistry in the apparel and footwear sector. Across the range of key informants, this view is uncontested. While there are other entities with a deep knowledge of chemical management in the industry, there are none that are simultaneously focused on the apparel and footwear supply chain, with a multistakeholder composition and reach extending between brands and chemical suppliers. In these latter stages of crafting a viable business model, now is a good time to make the investment. They point to an industry without international standards to regulate chemical management, and one rife with inefficiencies born out of disparate attempts to establish standards and certifications.

Those more knowledgeable of the grant's existence see in ZDHC an organisation needing discretionary funds that allow it to work with less dependence on brand resources and more speed to develop key facets of the programme, namely: the Gateway module, regional expansion, Leader Programming, and services in multiple languages to support supply chain capacity in chemical management.

Should ZDHC not have obtained the grant, progress would have been slower in developing its presence in production countries, in mobilising Leader Programming in the supply chain and in scaling the Gateway. Without the discretionary funding made available through the grant, respondents said that ZDHC's tools and processes would likely have been slower in their assembly, and less customised and coherent as a result of having to rely on brands and other supply chain actors to contribute as, and when able, and on their terms.

The grant design sets out 11 activity areas, as shown in **Appendix IX.** At the mid-point of the grant cycle, the following stand out in key informant interview feedback for their prominence in furthering the Roadmap to Zero programme:

> "
>
> *The grant has given us a stable source of revenue while we focus on building the tools and processes. Showing a credible programme inspired confidence, this is helping ZDHC gain the trust of stakeholders.*
>
> *– Brands and Retailers*
>
> "

- **Marketing the Gateway** – building the look, feel and functionality of this chemical data repository for all in the supply chain (discussed further under **Section 6.1 – Business Models**).

- **Convergence Activities** – establishing the ZDHC MRSL as single, harmonised list of chemical substances, the ZDHC Chemical Management System Framework as the primary point of reference for industry, and a host of enabling collaborations (discussed further under **Section 7.2 – Convening and Collaboration**)

- **Targeted Stakeholder Management** – expanding ZDHC's regional presence in targeted production countries (East Asia, South Asia and Southern

Europe) with industry (textiles and chemical suppliers) and governments (discussed further under **Section 6.1 – Business Models**)

- **Translation of ZDHC Guidance Documents and tools and creation of the knowledge hub**) – positioning the Roadmap to Zero Programme for easier access across key language groups (discussed further under **Section 7.1 – Organisational and Network Effectiveness**).

Activities associated with the creation of an innovation/matchmaking platform, with the strategic positioning of the ZDHC Academy and with the development of supply chain capacity to provide consumer facing communication (transparency) are widely recognised as core to the ZDHC Programme. However, they are as yet works in progress with yields (e.g. innovation pilots yielding chemical/process substitutes for hazardous chemicals, new strategic alignments and expanded instructional reach, traceability and transparency tools for the supply chain) still to be felt.

There is more ambivalence in the choice of two activities in the grant design document. While deemed relevant, the wisdom of introducing circularity and of expanding ZDHC's chemical management practice with the attention given to fibre production is questioned. In the critique, the former is a "forward" stretch, the latter a "lateral" stretch for an organisation that at the start of the grant was attempting to implement and demonstrate the viability of its business model. For both activities, see the discussion under **Section 6.2 – Innovation**.

The one remaining activity among the eleven in the grant design document is the business case study on ZDHC implementation. Its intention was to demonstrate a direct association between the use of safer chemical inputs, environmental benefits and reduced social and financial costs. The relevance of the activity is unquestioned; its timing, close to the beginning of the grant cycle and still early in the development of the business model has been problematic, however. This is discussed further under **Section 6.1 – Business Models**.

4.1.3 *Grant Modality*

By all accounts, the grant is built on a foundation of shared interest between ZDHC and Laudes Foundation in advancing sustainable chemistry in the apparel and footwear industry. It also builds on a track record of three closely related funding initiatives supported by Laudes Foundation launched and running well, though still underway at the start of this grant. One such initiative, supporting a 5-year Strategic Growth plan, was particularly important to the design of this grant to the extent that it included a SWOT and organisational gap analysis ahead of identifying strategic growth priorities and performance metrics for ZDHC. As well, there was mission alignment between ZDHC and the Laudes Foundation through a common interest in circularity, though, as discussed in the next section, this alignment can only be described as partial.

At the same time, there is an inconsistency between the programmatic focus of the accountability mechanism assigned to the agreement, on the one hand, and the core support intent of the grant, on the other. In part, this can be traced to the C&A Foundation not having an operational definition of "core support" nor a framework to support it.

Across public administrations and philanthropic organisations, eligibility for core support funding is generally understood as follows:

- Support is directed to strengthen/reinforce organisational capacity, rather than to implement any specific programme or project. As such it is unrestricted, i.e. not tied to deliverables or outcomes.

- It is usually predicated on their being a considerable degree of alignment in mission between funder and recipient organisation.

- There is sufficient trust/confidence in the organisation, built from a history of positive engagement and assurance related to the recipient organisation's management fundamentals.

- The basis for dialogue during implementation and for results documentation is agreed up front.[3]

What Laudes Foundation and ZDHC entered into with this agreement is consistent with the core support characteristics noted above in a few respects, yet it also differs in significant ways.

Grant performance is referenced to a results logic model, or log frame, that connects the activities outlined above to a set of outputs, outcomes, and to associated outcome indicators and targets. Grant disbursements, rather than being conditional on eligibility parameters worked out in the original agreement, are scheduled on an annual basis against an array of programme output and outcome targets. Further, the budget of the grant is distributed accordingly, spreading thin the contribution in any given area. Organisational Strengthening is included as one of the programmatic work streams that house the activities identified. As such, organisational capacity building is understood in the vein of specific staff/consultant hires for the purpose of implementing core elements of the ZDHC Programme: expansion into fibre and raw materials, marketing of ZDHC tools, and harmonisation/convergence activities related to the ZDHC Chemical Management Framework. With core support grant resources closely tied to output and outcome deliverables, as described, the scope for adaptive management is curtailed. In effect, these are to be seen less as discretionary and more as programme support funds.

> *Right now, we (champions of better chemistry) are like a toddler; circularity might be better dealt with when we are a teenager – but we have to start to imprint the concept in the industry now to pave the way.*
>
> *– ZDHC Leadership*

Putting aside the way Laudes Foundation support has been set up under this agreement, several factors bear on the question of the whether the use of a core support grant mechanism was appropriate or not. Literature reviewed on grant making does not specify a particular threshold of organisational maturity to be crossed before issuing a core support grant, nor does it specify risk thresholds to be avoided, but it is clear that the core support modality is founded on their being a high level of confidence in the ability of the funded organisation to deliver on the funder's philanthropic goals. In this regard, there are three considerations on Laudes Foundation's 2018 decision to designate this as a core support grant. The first was ZDHC's level of maturity. At the time of issuing the grant, ZDHC's was closer to "developing" or, as the rubric for this review suggests, "at a stage of making things work smoothly". Second, pertaining to programming risk, an explicit part of the grant's design was to establish that there is a business case across the apparel and footwear supply chain for removing hazardous chemicals. A third consideration has to do with a perceived discontinuity in mission alignment and a decision to exit the relationship at the close of this grant (a matter discussed below).

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[3] Sources referenced include: The Center for Effective Philanthropy; The Institute for Voluntary Action Research (IVAR); Grantmakers for Effective Organisations (GEO); Amplifier (Natan Fund); Candid Foundation; Robert Wood Johnson Foundation, Sean Stannard-Stockton (Tactical Philanthropy Blog); UNICEF; and Government of Canada, Treasury Board Secretariat.

4.2 Alignment

Finding 2: **Grant activities align substantially to ZDHC Priority Resource Areas in its Strategic Growth plan. By contrast, alignment of the grant design to the strategies of the Circular Fashion Programme that issued the support hangs on a strand of activities that are of secondary importance to ZDHC. Today, alignment in relation to Laudes Foundation's current strategic direction is even less assured.**

Regarding the alignment of the grant with ZDHC, all activities in the grant design are referenced to the ZDHC Strategic Growth plan, ratified by the board in December 2017. Three of six outcomes align directly with Priority Resource Areas (PRA) in the plan. Indicators for these outcomes are synonymous with the Key Performance Indicators (KPIs) in that document. The remaining three align in a contributory way to the PRAs as reflected in supporting narratives (including goal statements and strategies). Key informants variously describe the grant as means to accelerate the implementation sought in the Strategic Growth plan.

Regarding grant alignment to Laudes Foundation, in 2018 the then-named C&A Foundation launched its Circular Fashion Programme ushered on by a growing awareness of the fashion industry's contribution to environmental degradation and climate change.[4] Leading up to the launch of the Programme, C&A Foundation sought potential industry partners, including those with a strong perspective on chemicals management. Knowledgeable of ZDHC's work to date, the Circular Fashion team engaged with ZDHC to explore the potential to integrate circularity concepts (including for example chemical leasing) into the ZDHC business model.[5]

Discussions yielded an understanding that ZDHC's current mission had to be trained on phasing out hazardous chemicals, but that it was important, secondarily, to engage on circularity with an evidence base informed by chemistry and with an understanding of circularity's longer-term relevance to the apparel and footwear supply chain. This is born out in the text of ZDHC's Strategic Growth plan. In it, circularity is recognised by ZDHC as emerging, in need of a chemistry analysis, and relevant to ZDHC's goal of being the strategic centre piece of sustainable chemical management (abstracted from its Strategic Plan, PRA 4). Inclusion of the circularity study as an activity in the grant design reflects this understanding. Progress with this activity and perspectives on its relevance to ZDHC are discussed more fully in **Section 6.2 – Innovation**.

The decision to designate this as a "tie off" or exit grant came in recognition of the differential in mission alignment. Now, two years later, Laudes Foundation is revamping their funding strategy. It is not yet clear the extent to which circularity, the apparel and footwear sector, or chemicals management align with the Foundation's emerging priorities for catalysing systems change, though a further divergence in alignment is likely.

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[4] A year earlier with the funding support of the then named C&A Foundation, the Ellen MacArthur Foundation and Circular Fibres Initiative launched a research publication exposing the clothing system as, "extremely wasteful and polluting". See, Ellen MacArthur Foundation (2017) *A new textiles economy: Redesigning fashion's future.* Available at: http://www.ellenmacarthurfoundation.org/publications

[5] The chemical leasing model aligns the interests of the supplier and the user around the service rendered by the chemical - as such it reduces chemical use and waste. This is discussed in a September 2020 podcast by Phil Patterson. See Sustainable Fashion Academy (2020), *Big Closets Small Planet with Michael Schragger*, Available at: https://www.sustainablefashionacademy.org/podcasts/big-closets-small-planet/make-your-case-phil-patterson-circular-chemical-management. A 2020, Laudes Foundation commissioned study by Patterson on the subject can be found at: https://www.laudesfoundation.org/en/resources/2020/05/chemical-circularity-digital.pdf

4.3 Good Implementation

Finding 3: Grant activities build on the results of previous grants. Implementation compares favourably to the grant's indicative spending plan, though in some instances, results targets associated with that spending are unrealistic. Quality personnel have been brought into strategic roles, though in-house chemicals expertise remains at a premium. Operational efficiencies can be linked to personnel deployment and communications upgrades. Constraints in grant implementation are largely synonymous to those for ZDHC as a whole; most pertain to the handling of the COVID-19 pandemic.

4.3.1 *Building on Previous Work*

In implementation, the core support grant carries forward work supported under three previous Laudes Foundation grants. ZDHC's funding relationship dates back to December 2016. The first grant, valued at €470,000, supported the development of the ZDHC Facility Discharge Registry, a disclosure platform for tracking and leveraging remediation of wastewater from manufacturing facilities. The second grant, valued at €275,000, supported another facet of the Gateway, the design and launch of the ZDHC MRSL Performance In-Check module that manufacturers use to understand and manage their chemical inventories.

End of project self-evaluations posted in late 2019 and early 2020 indicate success in meeting the performance expectations of both initiatives. Core grant resources have since been used to continue to refine and market the two modules and to address data integrity issues on the wastewater module. The third grant, valued at €110,000, supported the development of the above-mentioned Strategic Growth plan that has shaped the design of this core support grant.
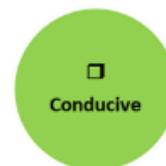
4.3.2 *Implementation Compared to Intentions*

To this point, spending is occurring across all activities and actuals are within indicative budget parameters in most instances. Differences in the rate of spending across activities is explained by ZDHC as a function of sequencing and of the relative time intensity of each activity, mainly. Differentials between planned and actual are explained mostly by the emergence of unforeseen circumstances through implementation. Providing a measure of flexibility, the budget table anticipates adjustments to milestones and data across most activities. The spending picture is presented in **Appendix IX**.

ZDHC confirms its intent to proceed in all activity areas as described in the design document, the one variance being an expansion in the understanding of "consumer facing" communications. The scope has been broadened beyond the development of brand communications. It includes the development of technologies for assessing and communicating chemical footprints of all supply chain stakeholders engaged in the Roadmap to Zero programme. No unintended results have been reported and none were described during key informant interviews.

4.3.3   *Referencing to Targets*

In the discussion of the grant modality in **Section 4.1 – Right Design**, reference is made to the pairing of a core support granting arrangement with the use of a programme framework, or log frame, that links grant activities to a chain of results at an output and outcome level. There, the appropriateness of the pairing is questioned from a design perspective. The range and ambition of select targets contained in that log frame are questioned for the degree of constraint placed on implementation. As per the contract document, payment hinges on the achievement of the targets identified in the Implementation Monitoring & Evaluation and Disbursement Schedule.

In the first year of the grant, ZDHC was expected to deliver on targets under four of the six outcomes. In some instances, the targets were plausible. Publication of the ZDHC's business model was named as a deliverable by the end of year one. ZDHC user targets related to the Gateway, Academy and the Implementation Hub also seemed plausible, on first view, though an examination of user data for 2018 suggests these targets were set too low to be aspirational. By contrast, two targets set out in the log frame stand out as overly ambitious; they pertain to Brand and Supplier Leader Programme performance. Key considerations in judging the level of realism on these performance targets are the degree of influence that could be expected from a grant scaled at about 15% of ZDHC Programme costs, and the still formative stage of Brand and Supplier Leader Programming at the launch of the grant.

As it happens, a contract amendment was made in March 2020 that tempers the range and the ambition of grant targets for the duration of the cycle. Discussion of the grant's monitoring framework is taken up further in **Section 4.4 – Proper Monitoring and Adaptive Management**.

4.3.4   *Human Resources*

The staff and consultant hires under the grant as competent and mostly appropriate in support of ZDHC's strategic intent to, "create the organisational scale necessary for deep implementation of sustainable chemical management across the industry and its value chains."[6] Staff described a practice of hiring generalists (i.e. process engineers with: chemistry expertise, strengths in conceptualising chemical management practices in a supply chain setting, and strong communications competencies) and engaging specialist consultants (i.e. with deep subject matter expertise), as needed. Inherent in this practice is a trade-off between the cost savings and flexibility afforded by the utilisation of consultants and the in-house capacity gained by onboarding staff specialists. For the most part, the former is understood to be an adaptive management strategy that, while defensible, can at times leave ZDHC lacking in-house chemistry expertise. Another consideration relates to the level of paid specialist support provided to ZDHC's volunteer advisory groups. This is a subject of discussion and is addressed in **Section 7.1**.

Grant management is undertaken by an individual substantively versed in ZDHC's better chemistry mission and operations. In the capacity of Impact and Strategy Reporting Manager, this individual assigns and supports reporting roles for the purpose of preparing grant reports and the Foundation's internal and external communications. Knowledge of the grant, itself is confined to a few among senior staff and board. As such, the scope for staff to engage in discussion of its use to accelerate the Roadmap to Zero Programme has been limited.

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[6] See ZDHC Strategic Planning and Implementation Support, October 31st, 2017, P5 (PRA #2 Business Model Development and Innovation).

4.3.5   *Efficiency*

Grant implementation occurs within the parameters of ZDHC policies and procedures, which include workplace efficiency expectations. There are no specific efficiency expectations attached to the grant. Grant deliverables have supported the creation of additional efficiencies into the workplace according to staff. The top three mentions from staff are:

- The revamped website, usable across seven languages, and the embedded knowledge hub - together producing better contributor understanding of the system and less transaction time related to Q&A;

- Regionalisation, with greater "on the ground presence" yielding more rapid, culturally attuned support and enhanced credibility; and

- Greater staff specialisation and organisation, with clearer role delineation and cleaner workflow and less reliance on "borrowed" resources from brands (see discussion of this under **Section 7.1 – Organisational and Network Effectiveness**).

4.3.6   *Factors Affecting Implementation*

The working relationship between ZDHC and Laudes Foundation has been favourable as measured by the appropriateness of the timing and size of the grant, and of the management and reporting burden. Specific to grant management, two factors bear repeating: one relates to the lack of clarity over the defining terms of the grant modality, the other to the limited set up within ZDHC to engage over the use of grant resources. Combined, these factors have constrained the adaptive management potential that would be typical under a core support mechanism. Adaptive management potential is further constrained by monitoring and reporting practices, as described below.

Specific to grant support toward the Roadmap to Zero Programme, the most prominent factors affecting implementation to date are:

- The presence of diverse, competing stakeholder interests - brands, manufacturers, chemical formulators, service providers, industry associations; and

- Key brand contacts (sustainability teams) held back by their own structures/hierarchies and changing business landscapes.

> "
>
> *There has been a lot of focus on sustainability and progress from all, even at the time of COVID. People are not giving it up, it is a good sign of engagement.*
>
> *– Value Chain Affiliate*
>
> "

Related to the second point, for some (including those on brand sustainability teams), the lessening influence of Greenpeace as an NGO "watchdog" further impinges on implementation to the extent that it reduces the external stimulus that informs the consumer public and conditions continuing brand interest in the Roadmap to Zero initiative. This is worrisome given current industry trends under COVID-19.

The main COVID-19 related constraints on implementation are the budgetary pressures on brand sustainability commitments. These are set to reveal themselves most fully in the coming fiscal year. As well,

disruptions along the supply chain are reported, particularly among smaller sized manufacturers that have lost or are still losing sales to brands. Grant funded activities are affected in the following ways:

- The extra time required by some brands, under the Leader Programme, to complete their year two self-evaluation and roadmap development;

- Manufacturers and chemical supplier (production countries) disruptions/ adaptations in:
  - The launch of Leader Programming at the supplier and chemical supplier levels; and
  - The implementation of monthly chemical inventory and water testing routines, and test results coming back showing higher than expected levels of contamination.

At the same time, there are examples of resilience from the supply chain, notably brand informants speaking of the robustness of their manufacturers who, despite lockdown episodes, are continuing to practice chemical management routines. Organisationally, ZDHC has sufficient adaptive capacity to address COVID-19 disruptions. As a distributed office and board, ZDHC was already accustomed to working across multiple work locations, so working from home has reportedly had little or no effect on workplace productivity. In June of this year, ZDHC managed its annual gathering of contributors online, with positive feedback.

4.4   Proper Monitoring and Adaptive Management

Finding 4:   **Grant data collection and reporting is appropriately referenced to output and outcome targets, and the narrative accounts are rich with intent to back results claims with evidence. The grant "results story" in the end of year monitoring reports is obscured by a narrow referencing to the grant agreement's disbursement schedule and by discontinuities in the results log frame.**

4.4.1 *Monitoring and Reporting Practice*

As per Laudes Foundation expectations, grant reporting is referenced to outcome and outcome/impact targets in the log frame. As well, the two reports received to date address additional requirements specified in the contract document, such as progress vis-à-vis sustainability and scalability, handling of constraints or risks (internal and external), and recommendations for the upcoming phase. The narratives are rich in detail, for the most part. Particular effort has been invested in addressing the more demanding performance targets related to Leader Programming and MRSL and wastewater conformance testing in the absence of fully developed data collection systems. Reporting on risk shows a an informal/intuitive approach to risk management. Overall, there are two key observations for consideration as factors negatively affecting potential for good adaptive management practice.

The first observation is that reports are referenced against the Implementation Monitoring & Evaluation and Disbursement Schedule as opposed to the log frame as a whole, as stipulated. The consequence of this is that the reader only captures progress on those aspects of grant supported implementation that pertain to scheduled deliverables. This fragments the results story of the grant's impact on the ZDHC Programme. Two examples are provided in **Appendix IX**.

The second observation is that the pathway connecting grant activities and outputs, on the one hand, to outcomes, on the other, is at times unclear in the reporting. In part, this has to do with the fragmentation

described above. But it also has to do with a shift in planning perspective that occurs in the progression of the grant log frame between output and outcome level results.

Output level results are plausibly linked to grant activities. For the most part, the reader can imagine grant level activities producing the results listed under outputs, as shown in the box below. Outcome level results, are associated with the performance of the ZDHC programme as a whole, as is appropriate for a grant that is designed to show acceleration and scale up.

ZDHC reporting to Laudes Foundation is organised by outcome. Subheadings list the requirements from the Monitoring & Evaluation and Disbursement Schedule in the grant agreement. Some of these requirements refer to output level targets. Here, the connection back to grant activities is clear, while the connection forward to the outcome is less so. Examples are given in **Appendix IX**. By contrast, some of the requirements being reported on refer to outcome level targets. Here the connection forward to the outcome is clear, while the connection back to outputs/activities is less so (see **Appendix IX** for examples).

There are at least two factors bearing on the level of clarity of the grant's contribution to progress. One is the formulation of the outcome statements themselves – they may be pitched beyond the range of the grant to influence in any meaningful way. The other is the attention paid in the narrative to showing how grant activities are involved and what effects are occurring through their interactions with other activities supported by the programme, but outside of the grant.

4.4.2   *Results Log Frame*

The grant log frame, set out in Appendix VIIIwith a more detailed analysis, is anchored in four activity workstreams described in a narrative as essential to, "successfully move the industry to replace harmful chemicals with safer alternatives and support industry movement toward circularity." These workstreams and the results flowing from them are referenced to ZDHC's Strategic Growth plan. A single output flows from each activity in a logical sequence. Most of the outputs are situated at the right level for ZDHC with grant support. In their phrasing, the rest exceed what is plausibly within ZDHC's sphere of control.

Six outcomes describe strategic supply chain shifts over which ZDHC – but not the grant itself – has a plausible degree of influence in the four-year time frame (see textbox). The wording for outcomes #5 and #6 is ambiguous, likely reflecting the state of thinking at the time over what the desired change in these areas would be.

As noted in Section 4.1.3, organisational capacity is implicit within the programmatic shifts that are reflected in the outcomes. There are no explicit ZDHC management or systems related outcomes. Appropriately, outcomes contribute to one or more of the Strategic plan KPIs.

> ### *Core Support Grant Outcomes*
>
> 1. Reduction and removal (phase out) of hazardous chemicals, use and uptake of safer and innovative alternatives by companies in the industry supply chains.
>
> 2. Uptake of a practical circularity roadmap by industry on chemicals research needs, innovative chemistry solutions and applicability of new business models.
>
> 3. Increase in the number and type of innovation pilots and related investments made to bring safer and innovative chemicals/ process/ technology alternatives to scale.
>
> 4. Increase in the convergence of chemical management frameworks and a harmonised implementation by brands.
>
> 5. ZDHC serves as the industry's central platform for improved decision-making and performance throughout the chemical management process.
>
> 6. Uptake of a consumer communication framework by the industry that contains chemicals information aligned with ZDHC.
>
> *Source: Grant Proposal*

Indicators, baseline and target data are attached to each outcome and, for the most part, appear appropriate to those outcomes. Indicators are predominantly numeric with a focus on number and percentage targets. There are no indicators tracking comparative shifts in perception, representation, messaging, or behaviour. Some relate to contributor/user engagement with various aspects of the ZDHC Programme satisfying the Laudes Foundation requirement to reference at least one "reach" measure from the list of Laudes Foundation wide coverage measures. Others relate to products resulting from collaborative inquiry or negotiation processes over which ZDHC would have influence but not control. A third class of indicator is focused on contributor performance. One exception in the matching of indicators to outcomes is the set for the second outcome looking for "uptake" of the circularity roadmap. The indicator and target are focused on the production of the roadmap itself which aligns more with an output level result and is clearly antecedent to industry "uptake".

Three impact level metrics with targets are included in the log frame; they are not referenced to any particular outcome statement; they appear to be at a higher level of result. Two relate to Leader Programme performance at the brand and supplier level, one to the conversion of successful pilots into additions to the MRSL. Until the March 2020 contract amendment, these were listed in the Implementation Monitoring & Evaluation and Disbursement Schedule as target requirements for disbursements. They have since been modified as explained under **Section 4.3 – Good Implementation**.

4.5   Good Communication

Finding 5:   **Dedicated staffing for grant reporting has been instrumental to the development of board reporting and to the widely disseminated ZDHC Impact report. Grant resources have also been ploughed into a publication targeted at audiences associated with the fashion supply chain and potentially able to influence detox related commitments. The largest constraint on good communication has been the availability of quality data.**

Grant reporting is used for the most part to service ZDHC's accountability relationship with Laudes Foundation. However, ZDHC's manager for the core support grant also serves as the ZDHC's Impact and Strategy Reporting Manager. Data gathered and analysed for grant reporting in ZDHC's quarterly reporting to board and in the development of ZDHC's Impact Report, the first of which was published in November 2019.[7]

☐ **Partly Conducive**

> " *The book simplifies complex realities and offers valuable insights into how to take action and implement already proven innovations to accelerate change.*
>
> – *Textile Focus (Industry Magazine)* "

The grant has also contributed half the cost of publishing ZDHC's first book, "Detoxing the Fashion Industry – for Dummies", an easy-to-read introduction aimed to empower brand/retailer leaders and sustainable fashion enthusiasts to engage in detox activities.[8] More than 1,500 downloads of the book had been made to the end of August. Independent reviews describe the book as accessible and informative (see **Appendix IX**).

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[7] The 2019 Impact Assessment Report can be accessed at: https://www.roadmaptozero.com/impact-report?locale=en#Our-Impact
[8] The book is downloadable free of charge from https://www.detox-fashion.club

Difficulties securing a flow of data to support communication, particularly that showing performance changes in the supply chain are relevant here but applicable to ZDHC as a whole. They are discussed under **Section 7.1 – Organisational and Network Effectiveness**.

5. Precondition

The criterion as part of Precondition is called "Changing the Narrative": it refers to how ZDHC, as an initiative, has been attempting to influence mental models, beliefs and assumptions within the apparel and footwear industry towards collaboration and reduction in the use of toxic chemicals. The results of the efforts on both fronts are summarised below as part of **Table 5.1** and then discussed thereafter.

Table 5.1: Overall Ratings – Changing the Narrative
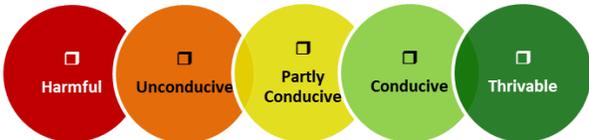
B1. Changing the narrative: Influencing mental models, beliefs and assumptions in ways that support the desired change	Harmful / Unconducive / Partly Conducive / Conducive / Thrivable
From a competitive to a collaborative apparel industry, articulated around ZDHC	Conducive
From less to more sustainable chemical management practices in the apparel industry	Partly Conducive

5.1   Changing the Narrative

Finding 6:   **In the context of chemical management, ZDHC has successfully continued work to convert a competitive apparel and footwear industry into a collaborative one, increasingly articulated around the ZDHC vision. Efforts to transition from using less to more sustainable chemical management practices have so far been foundational more than transformational.**

Changing the narrative is discussed under two aspects: transitioning from a competitive to a collaborative apparel and footwear industry and from using less to more sustainable chemical management practices in the industry.

5.1.1   *Collaboration within the Apparel and Footwear Industry*

Ever since it was created, and even more so since the turning point of 2015, ZDHC has worked towards establishing a pre-competitive space where stakeholders with diverging and competing interests could collaborate towards a common goal. Efforts undertaken over the duration of the grant, since 2018, have built on prior results from ZDHC and other initiatives such as the SAC, the Outdoors Industry Association (OIA), the Apparel and Footwear International RSL Management (AFIRM) Group. Key ZDHC achievements include obtaining the collaboration of the chemical suppliers, integrating BLUESIGN's and Inditex the List's formulations in the Gateway, and increasing its number of users and contributors. ZDHC is also gradually incorporating supply chain actors beyond the first tier of suppliers, described as an unprecedented progression in this industry. Through its work, ZDHC has provided additional proof that the apparel and footwear industry can work together with significant scale and depth in the supply chain. Moreover, ZDHC has managed to increasingly articulate the collaboration around itself, as a multi-layered, brand-led organisation with a multistakeholder

Conducive

"
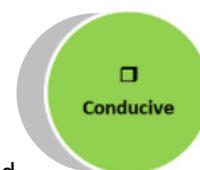
Where ZDHC has changed things is the collaboration, pulling everybody together. […] MRSL has become a de facto standard in the industry, even people outside of ZDHC are using it. ZDHC has so much pull on the industry.

– External Stakeholder

"

board and programme. It has developed a clear voice within the industry and is increasingly sought by stakeholders within and even outside apparel. This is an encouraging and necessary precondition for ZDHC making good on its better chemistry ambitions.

ZDHC has also successfully decoupled its narrative from that of Greenpeace, as there is an increasingly widespread understanding of the distinction between the Detox my Fashion campaign and ZDHC's focus on better chemical management, and on the different timelines on which the two initiatives operate (the campaign led to commitments expiring in 2020).

5.1.2 *Sustainable Chemical Management Practices*

As for changing the narrative around chemical management practices, from using less to more sustainable practices, ZDHC results have so far been foundational. Back in 2011, Greenpeace dramatically changed the narrative in the apparel and footwear industry when it shifted the focus from the toxicity of products and the use of restricted substance lists (RSLs) to the toxicity of inputs in the making of fashion products, that is captured by MRSLs. ZDHC has further changed the focus by linking the input (chemicals) with the output (the wastewater), thus providing a systems perspective.
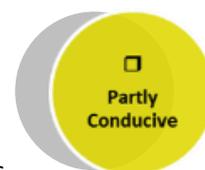
Since then, including over the last two years, ZDHC has concentrated on setting up the tools and the processes necessary to accumulate, verify, combine and share data to support good chemical management practices. This work has laid the foundations for growth, but it has yet to alter chemical management practices on a large scale. The soon to be fully rolled out Leader Programmes, for brands, manufacturers and chemical suppliers, are expected to further incentivise supply chain actors to make and hold commitments to better chemistry. These Programmes are well aligned for ZDHC to reach its potential and impact. Layer on to this ZDHC supported innovation and an increased operational understanding of chemical circularity and the prospects for a shift in narrative toward sustainability are sound.

6. Levers

Under the grant, ZDHC has used three main levers in support of systems change, i.e. shifting towards sustainable chemical management practices in the apparel and footwear industry. These levers have been business models, innovation and transparency. The progress accomplished with the lever is represented in **Table 6.1** below and each lever is then analysed below.

Table 6.1: Overall Ratings – Levers

6.1   Business Model for the Roadmap to Zero Programme

Finding 7:   **As compared to 2018, there is greater willingness today in the supply chain to invest time and money in better chemistry. The Gateway modules are used, well regarded and thought to be improving with continuing refinements. A new more demanding Leader Programme is rolling out for brands, manufacturers and now chemical suppliers. By design, these are to incentivise better chemical management, procurement choices and market positioning along the supply chain, all informed by a reliable flow of facility and chemicals data. Signals are promising from this systems approach, but conclusive evidence of the business case for the Roadmap to Zero Programme remains to be secured.**

At the time of launch of the core support grant in mid-2018, most elements of the Roadmap to Zero Programme were already in place. These are listed in **Appendix XI**. Backed with the freshly minted ZDHC 5-year Strategic Growth plan, the intent of the grant was to help ZDHC transition from developing to implementing the Roadmap to Zero tools and scaling operations for global impact. At the mid-point, most facets of the model have been refined or are in the latter stages of development, support services have been enhanced, and enabling collaborations have been established. Regarding the Gateway, specifically, the grant has supported improvements to the look, feel and functionality of the platform. ZDHC senior leadership estimates that the model is 85% complete – see systems drawing in **Appendix XI**. Supply chain participation and Gateway transaction figures show that the business model has growing appeal from across the industry in its latter stages of development, as set out in **Table 6.2**, below.
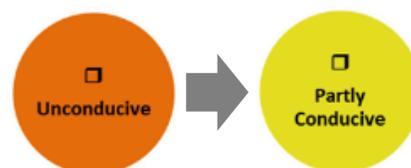
Table 6.2: Evolution in ZDHC's Users

	2018	2019	2020
Academy users	-	6,334 (Dec)	8,431 (Sept)
Gateway users	2,768 (Oct)	4,412 (Oct)	5,820 (Oct)
Implementation Hub users	N/A	N/A	114 (Sept)
Contributors	110 (Aug)	138 (Aug)	166 (Aug)

Source: ZDHC Documents

As of October 2020, the organisation counts 5,820 Gateway users, 8,431 Academy users, and 114 Implementation Hub users. These numbers far exceed the grant target of 4,000 active facility users for September 2020.[9] Over the last two years, the platform that has seen the highest increase in its number of users is the Gateway, with an increment of 3,052 users (52%). The Academy lags behind slightly, with a 33% increase in the last year (2,097 new users). As for the Implementation Hub, it formally started having users in 2019 and now counts 114. It is noteworthy that manufacturers represent the bulk of ZDHC's users, as they compose 74%, 50%, and 100% of users of the three platforms, respectively. The number of contributors was 110 in 2018, it has since grown to 166, a 51% increase. Within this, certain stakeholder groups have increased in size more than others (chemical suppliers, 69% and brands, 67% versus brands, 25%, and associates, 38%).

The current iteration of the Brand Leader Programme – Brands to Zero – clarifies ZDHC expectations for brand adoption around a single (ZDHC) MRSL and chemical management system framework, incorporates for the first time an independently verified assessment process and scoring system referenced to that framework, and then offers support services geared to addressing identified gaps. Now, midway through a second annual cycle of self-assessments, obtaining allegiance to a single chemical management framework remains a challenge. While the 30 signatory brands are increasingly committed to the ZDHC MRSL, brand informants indicate reticence to give up current chemical management routines and supports for reasons that include familiarity, cost and desire to see signals of net benefit. The self-assessment process, itself, is in a formative state while ZDHC and its third-party verifier, KPMG, refine the instruments and scoring methods. The exercise of gathering the data required is novel and time consuming for many, though it is acknowledged by brands that the outlay of effort is a function of the novelty. At this formative stage in the Programme, ZDHC and the brands are yet to firm up arrangements for public disclosure of brand performance against Roadmap commitments. This is expected to be done over the coming year through a consultative process with brand contributors. Key considerations in the development of brand disclosure arrangements include:

- The importance of demonstrating superior "leader performance", a) to give those brands due recognition and, b) to inspire confidence in the Roadmap to Zero Programme within the broader community of stakeholders;

- Not discouraging entry into the Programme with a scheme that is too threatening or difficult to achieve;

- Providing sufficient time in the Programme to allow better chemistry practices to take hold;

- Curtailing resources and profile to brands failing to demonstrate commitment; and

- Understanding the merits and drawbacks of disclosure options to be implemented by ZDHC including the publication of a leader board, a presentation of performance that masks individual

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[9] The extent to which there is overlap between the users of all three platforms is unclear. Regardless, the target of 4,000 users has been exceeded by far.

brand identities, an arrangement whereby ZDHC leaves it up to each brand to post their own performance data, potentially on the Gateway, and then draws public attention to what is posted.

Sustainable chemical management by brands hinges on them extending their chemical management reach along their supply chains. In mid-2020, in the midst of the COVID-19 pandemic, ZDHC launched the similarly structured leader scheme for manufacturers called, Supplier to Zero. It comes with a self-assessment process using criteria referenced to the same chemical management framework and to a scoring system for the purpose of incentivising good performance at this level. The Input chemistry of each user is subject to a third-party verification by a ZDHC approved individual or organisation. The MRSL conformance tool, Performance In-Check, provides registered users with a profile of their chemical inventories, in particular, showing conformance levels of substances with the ZDHC MRSL. This information is drawn from the Gateway's chemical module. Similarly, the wastewater guidelines conformance tool allows manufacturing facilities frequent and independent water discharge testing against conventional and MRSL standards[10]. Overall, ZDHC has set up the Leader Programme to support manufacturers in improving their chemical management practice. This includes making wise chemical procurement choices and using the verified data pertinent to their inventories and water testing to differentiate themselves from their competition. Verified and unverified discharge test results are publicly visible on Detox.Live. As with the Brand Leader Programme, ZDHC is consulting with its initial cohort of contributors on implementation to inform continuing refinement.

At the same time, ZDHC is engaged with chemical suppliers at the end of the supply chain to establish a third Leader Programme, this time incentivising the performance of companies that create and sell chemical formulas. This programme is still in formation, but the intent is to drive MRSL conformant chemicals toward the Gateway's chemical module library and differentiate from the crowd those companies producing them.

The interactive effects of the three levels of Leader Programming are expected to produce procurement choices among brands and manufacturers that are informed through better chemistry practices and a unitary commitment to the ZDHC MRSL. This, in turn, should drive chemical suppliers to produce safer, MRSL conformant formulations to meet manufacturer specifications which will have been influenced by the brands requiring safer chemistry in their manufacturing of garments and leather.

In addition, chemical suppliers are expected to see the potential for positive market positioning through their adherence to the ZDHC chemical management system framework and gain from it. Manufacturers are expected to see the same potential vis-à-vis brands and

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Element of the ZDHC Chemical Management System

Policy Statement

Strategy – for chemical management

Assessments – regulatory, hazard and risk assessment, supply chain assessment

Health and Safety – exposure control, PPE, emergency procedures

Chemical Inventory

Storage and Handling – chemical labelling and handling

Output Management – wastewater and sludge, air emissions, waste and disposal

Process Control – documents and records, incidence and non-compliance management, general maintenance and housekeeping

Continuous Improvement – CMS performance review, training

Source: ZDHC Chemical Management System Framework V1.0, May 2020

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[10] The MRSL Conformance Check Module and the Facility Discharge Registry components of the business model were developed with Laudes support under two separate grants. Details of each are set out in End of Project Self Evaluation Reports dated, December 2019 and May 2020, respectively.

also gain from their better chemistry practices. And both are expected to gain visibility through having their information on a portal that is open to their respective markets. For their part, brands see their procurement options more clearly. Additional time and cost saving efficiencies are expected for all parties by virtue of ZDHC's incorporation of product certification standards already established in the industry[11]. The end result, as described by one ZDHC leader, is a "fly wheel" effect of mutually reinforcing interactions along the supply chain. This is illustrated in a systems drawing of the ZDHC Roadmap to Zero Programme set out in **Appendix XI**.

At the mid-term in the grant cycle, signals of progress include: brands showing improved MRSL conformance and water quality test data, increases in the number of manufacturer and chemical supplier contributors signed on to the Programme, and a case study showing rewards going to manufacturers adopting safer production technology (see **Appendix XI** for a more complete list).

One additional group of supply chain actors was mentioned for attention as the model develops. These are the buyers, situated between some brands and their manufacturers. These actors are contracted to purchase from manufacturers on behalf of the brand. Without informed participation, these actors can reportedly hamper brand efforts to engage their supply chains.

In the main, key informants are satisfied with ZDHC's progress in advancing the business model for programme sustainability and they see in the model great potential for scalability as the final tools and processes fall into place. Notwithstanding ZDHC's progression toward a multistakeholder organisation, brands still have a

> "
> *For chemical suppliers, transactional costs cannot be too high, and they need to be justified. Overall, the burden of participation is a little more costly than before and not fully compensated for in the market, yet.*
>
> *– Associate*
> "

pivotal role as the main driver of the business model. At the same time, chemical suppliers have a high strategic importance for ZDHC. As the intellectual stewards of better chemistry, their presence is seen to be ever more important as the programme engages more fully with innovation.

The most prominently mentioned areas of concern about the business model are set out below:

- **The undermining effect of "basement" pricing by brands** - As one industry informant put it, "if price continues to rule, this will be bad for the supply chain." The concern is that, given tight margins, some brands act like brand leaders in their better chemistry asks of industry but then behave differently in their purchasing and placement of products in front of consumers. This sends the wrong signal to manufacturers; they lose sight of why they are investing in better chemistry.[12] The prevalence of this sourcing practice within the Roadmap to Zero programme is not well understood at the time of the MTR, though the practice is anticipated in the design of the Brand Leader to Zero programme.

- **Certifier Commitment to ZDHC – but with irritation** – Each certifier has their own approach to chemicals evaluation, and their own pricing schedules. To keep it simple, ZDHC has accepted them as cleared under one of three MRSL conformance criteria. To the manufacturer, regardless of the

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[11] A list of ZDHC accepted certifiers can be found at: https://www.roadmaptozero.com/input#Gateway-Chemical-Module
[12] Two related studies reinforce key informant concerns regarding brand ambivalence toward sustainability commitments: one published in the Harvard Business Review and the other from the University of California, Berkeley. Both suggest that in the fray of harsh competition, these commitments are often compromised. See: https://hbr.org/2020/03/a-more-sustainable-supply-chain and https://doi.org/10.31235/osf.io/g67d8

services offered and the prices attached to them, the end result is the same conformance level in the Gateway, regardless of which certification they received (as long as they are authorised to evaluate said level of conformance). The implication this has for participating certifiers is that suppliers will be drawn to the least complex and expensive evaluation service. Another dimension of this concern centred on a perceived untapped 'win-win' opportunity for ZDHC recognised certifiers to help address the large universe of uncertified formulas in the chemicals module of Gateway.

▪ **The lingering question of whether there is (yet) a business case for ZDHC** – In 2018, when the business model was at an earlier stage, the consulting firm Price Waterhouse Coopers was unable to show a business case for removing hazardous chemicals from textile manufacturing (Roadmap to Zero Programme). Study findings showed wide agreement that, "it (ZDHC's Roadmap programming) was the right thing to do" but that, at the time, informants were unable to show whether programme costs of ZDHC could be supported by industry, even with the benefits that would accrue, such as: the time and cost savings to chemical suppliers through being able to reference a single MRSL, time and costs avoided by manufacturers in chasing multiple certifications, and the reputational dividends along supply chain that come with adherence to better chemistry management practices, and obvious health and environmental benefits. At the mid-point in the grant cycle, there is continued ambivalence on the question. While the signals are promising, key informants including chemical suppliers, manufacturers and brands say it is still too early to tell whether benefits outweigh costs. Beyond the case example in relation to DMF, there is as yet no body of data to show that time/cost efficiencies and market positioning for suppliers and manufacturers is yielding net benefits. Transaction costs for Gateway users are a source of concern, due to the following reasons:

  – Chemical hazard communication is difficult; to be able to say that, "our supply chain is 25%-30% certified", while a big achievement, doesn't convey well to most consumer audiences;

  – ZDHC tools are only just coming online along with a flow of data to show performance – it is in large part a maturity issue;

  – ZDHC is expensive relative to other sustainability programmes in which brands invest; and

  – Sustainability budgets are especially compressed in COVID-19 times.

At the time of writing, ZDHC anticipates repeating the business case study in 2022, once the business model has had a chance to "roll out" with all components in place.

6.2   Innovation

Finding 8:   **ZDHC's innovation agenda exceeds what the organisation has been able to address till now, creating a backlog of needs and opportunities. Grant supported pilots have yielded useful results in the form of industry guidelines and new production technologies, and they underline the benefits that can accrue in pre-competitive, multistakeholder processes. As such, they show a way for ZDHC to address the innovation gap. Meanwhile, ZDHC-led conversations to contextualise circularity in the chemical management domain are starting but, as yet, without a pathway toward the expected outcome of "industry uptake".**

One the core support grant's six outcomes relates to innovation. It calls for an, "increase in the number and type of innovation pilots and related investments made to bring safer and innovative chemicals/processes/technology alternatives to scale". Initial deliverables for this outcome – two innovation pilot studies – emerged from ZDHC's work in raw materials. One pilot in China sought a substitute for DMF – a toxic solvent used in the production of synthetic leather. The solvent was listed on the MRSL candidate list, the place where hazardous chemicals are parked until safe alternatives are brought to market. The other pilot concerned the use of carbon disulphide in the production of a fibre that is integral to the production of rayon. Both studies began before the grant.
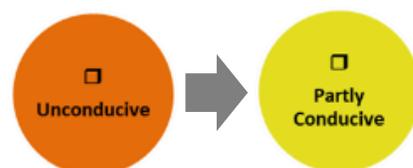
- In the case of the DMF study, the grant supported the scale up of a process innovation found for the factory floor that took away the need for DMF to be used at all in the manufacture of synthetic leather. By 2018, the task for ZDHC and stakeholder colleagues was to increase production capacity using the new technology and to ensure that suppliers and brands were also ready to adopt the solution. Today, production levels have risen, and factory conversions have continued beyond the pilot factories. The DMF remains on the candidate list with further calls for chemical substitutions.

- In the absence of a ready substitute for carbon disulphide in viscose production, two courses of action were taken; the first to develop a set of MMCF wastewater discharge and air emission guidelines, the second to continue the call for chemical substitutions. To date, the grant has supported the development of those guidelines which were launched in April 2020.

From a procedural standpoint, the two case studies appropriately relied on the use of pre-competitive, multistakeholder processes of problem/solution identification, creating the potential to leverage change in global synthetic leather and cellulosic fibre production. The MMCF case was particularly noted for its strategic "savvy", as it laid down for the first time what will likely be trend-setting guidelines for management practice on a global scale, especially given the relatively small number of viscose producers sharing the lion's share of the viscose market. From a substantive standpoint, in both studies, efforts to find safe, viable chemical substitutions or processes have remained unfulfilled after three years and, in the end, the MMCF guidelines have been aligned closely to the EU's ten-year-old Industrial Emissions Guidelines and, as such have missed an opportunity to be more aspirational.

One of the more common refrains heard across key informants is that the innovation agenda for ZDHC outsizes its current set up to address it; that there is a backlog of needs and opportunities to remove hazardous chemicals from use. For example, chemicals identified during the early days with Greenpeace remain in circulation today, suggesting that ZDHC starts with the low hanging fruit and create inspirational stories that will inspire action. Key informants agree that ZDHC is well placed to facilitate such innovation given its capacity to bring together industry actors skilled in analysing for safer and/or green chemistry.

A partnership formed in July 2020 with the NGO, ChemSec shows ZDHC making good on its intent to establish an innovation, matchmaking and piloting platform to address the MRSL candidate list with safe alternatives[13]. It is too early to tell whether this mechanism can bring the right combination of technical expertise, funds and business acumen to the task. Reportedly, twelve requests have been placed on the platform by ZDHC (September 2020). Meanwhile, ZDHC is contemplating the design of a dedicated platform for the same task that will be hosted on a ZDHC platform. It has budgeted for such in the remaining two years of the grant.

ZDHC's circularity commitments are referenced to an outcome that calls for the "uptake of a practical circularity roadmap by the industry on chemicals research needs, innovative chemistry solutions and applicability of new business models." The circularity roadmap, published on ZDHC's website in 2020, suggests ways the ZDHC Roadmap to Zero Programme could integrate circularity concepts. The increasing presence of circular approaches point to the need for ZDHC to engage with the subject matter, but there is caution. On a practical level, informants suggest there is still plenty of work for ZDHC to do to eliminate hazardous chemicals and unsustainable chemical management practices in the apparel and footwear industry as it is configured today. Further, chemical mapping/analysis is lacking and is needed to inform good circularity practice as it develops. Here ZDHC is in the company of other organisations with a particular expertise in chemical circularity. From a higher world view perspective, a paradigm shift is required in the industry to make the transition to circular economy approaches. It is a shift that takes time to bring about, therefore actions are needed now. To underline the point, informants suggest that the shift required to move toward circular economy thinking in the sector includes a willingness to accept full cost accounting.

There are broad suggestions regarding circularity in ZDHC. Recovery and revalorisation are already prescribed in the MMCF guidelines mentioned above. ZDHC's leadership sees future synergies between circularity and the use of block chain technology to trace the assembly and movement of products through the supply chain. There is potential for ZDHC to incorporate green chemistry/circularity considerations as part of innovation processes. And the organisation is sharing its chemistry informed insights at the table with other organisations that are more centrally focused on circular economy approaches in the fashion sector. But to embrace the range of opinion reflected in the remarks above, and to make progress toward the outcome calling for industry uptake of the circularity roadmap, a coherent plan is required.

6.3   Transparency

Finding 9:   ZDHC has made significant progress in increasing the level of transparency within the apparel supply chain. To date, however, accountability practices have not been sufficient to drive better chemistry. ZDHC is in a good position to promote consumer-facing transparency, but efforts in this area remain emergent.

Transparency corresponds to the grant outcome, "Uptake of a consumer communication framework by the Industry that contains chemical information aligned with ZDHC." An original focus on consumer communication has been softened with an emerging understanding that ZDHC is in a position to enable more transparent communication across the supply chain related to product performance.

Partly Conducive

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[13] The collaboration was announced July 15th, in the following press release: https://chemsec.org/press-release-chemsec-and-zdhc-collaborate-in-a-joint-request-for-safer-alternatives/

> *"*
>
> *The Gateway has led to some transparency, users get all this information about formulations, I believe it has helped a lot. Chemical suppliers don't like to disclose all the ingredients in their formulations, ZDHC is finding a way around that.*
>
> *– External Stakeholder*
>
> *"*

To date, ZDHC accomplishments on the topic of transparency are mostly situated within the supply chain. Important progress has been made on the functionality of the Gateway. On this platform, users (i.e. contributors and their supply chain) can now access information on formulations, manufacturer chemical inventory and wastewater discharge data. This increased level of transparency is entirely novel; historically, the apparel and footwear industry has been protective of this data. ZDHC has improved transparency by refining its systems and by expanding significantly the quantity of users and of data available in the Gateway.

Underway are two research initiatives. One is an analysis of the potential of blockchain technology to increase transparency and traceability within the apparel and footwear industry. The other pertains to fabric/product labelling that will be tied to the Supplier to Zero programme. Both are working to plans with collaborators and with design and pilot deliverables expected in late 2020 and into 2021.

There was an assumption among certain stakeholders that access to data among supply chain actors would naturally lead them to change their behaviour for the better; but this belief is challenged as follows. As of yet, there is limited transparency within ZDHC around brands and manufacturers' compliance with standards and transactions in the supply chain. The concern is that not displaying sourcing practices related to conformant and non-conformant chemicals limits accountability, and curtails incentives to change.

Concerns expressed around disclosure are consistent with the conclusions of a Laudes Foundation funded study from the University of California, Berkeley. Research showed that fashion sustainability tools lay an important foundation, but that transformative change ultimately depends on factories receiving more (or fewer) orders based on their sustainability performance.[14] The study specifies that behaviour change in the supply change hinges on the presence of external transparency and accountability.

> *"*
>
> *Making transactions in the system transparent is important. Despite the value in having trust relationships, it is important to have in place robust verification.*
>
> *– Brands and Retailers*
>
> *"*

Consumer-facing transparency is an emerging area of work for ZDHC. In addition to the research and development work mentioned above, concrete efforts to communicate to industry watchers, supply chain managers and consumers on sustainable chemicals include the publication of the "Detoxing the Fashion Industry – for Dummies" book (discussed under Section 4.5). ZDHC has released the Detox.Live Map, currently showing 1221 suppliers worldwide alongside their level of conformance with ZDHC's

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[14] Lollo, N., & O'Rourke, D. (2020). *Measurement without Clear Incentives to Improve: The Impacts of the Higg Facility Environmental Module (FEM) on Apparel Factory Practices and Performance*. Retrieved from: https://doi.org/10.31235/osf.io/g67d8

wastewater discharge requirements. The map has a functionality to highlight connections between facilities and brands, though this feature is only lightly populated with data at the time of writing.[15]

While ZDHC is in a good position to promote uptake of consumer-facing transparency framework and tools by industry actors, and has begun to do so, some challenges stand in the way, notably concerns around intellectual property and competition laws, as well as a reluctance from some contributors to collaborate with ZDHC for fear of having their record on show. For these reasons, the organisation has, to this point, been deliberate in the way it develops its consumer facing transparency. Nevertheless, it is a component of the grant, and one of the few that remain tied to grant disbursements following the March 2020 contract amendment. This testifies to the importance of the topic for Laudes Foundation. Greenpeace has also signalled the importance of transparency in the detox effort, encouraging ZDHC to "ensure that [its wastewater] platform [would] guarantee unlimited public access to this data including identification of the supply facility and the ordering brand", on the basis that "almost all ZDHC/Detox brands expressed their full support for this, subject to a legal understanding on the ownership of data between the brand and the tested supplier."[16] A priority for ZDHC as part of the second half of the grant will be to steward its contributors on their journey towards transparency and to refine its framework and processes in this regard while addressing the aforementioned challenges.

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[15] Only three industry connections are currently represented in the map, as of late October 2020 (https://www.detox.live/map).
[16] Greenpeace (2018) *Destination Zero- Seven years of Detoxing the Clothing Industry.* Available at: https://www.greenpeace.org/international/publication/17612/destination-zero/, p.29

7. Cross-Cutting Lenses

Two cross-cutting lenses are directly applicable to the grant provided to ZDHC: organisation and network effectiveness, and convening and collaboration. **Table 7.1** below displays the progress achieved for both, and they are discussed thereafter.

Table 7.1: Overall Ratings – Cross-Cutting Lenses

	Harmful	Unconducive	Partly Conducive	Conducive	Thrivable
D2. Organisational & Network Effectiveness: Organisations & networks with the right ability to produce relevant outcomes			Partly Conducive		
D3. Convening & Collaboration in powerful and transformative ways towards meaningful industry change			Partly Conducive → Conducive		

7.1 Organisational and Network Effectiveness

Finding 10: Over the course of the grant, ZDHC has continued consolidating its organisational and governance structure, developed its body of policies, and somewhat built its operational capacity, including delivery of services to support users. Despite some notable improvements, Monitoring and Evaluation, and to some extent communications, remain a challenge for ZDHC.

ZDHC has changed drastically over the last few years, as it has been transitioning from a start-up to a more formally structured organisation. As part of this transition, ZDHC has established different teams, developed its processes, and been building a body of policies (e.g. to combat fraud and money laundering). In a measured way, to date, the organisation has converted its board of directors from being "brand-only" to being more representative of the supply chain. ZDHC has set up 23 (multistakeholder) Focus Areas and Task Teams to work on different topics and, as a result, has made significant progress in developing guidelines for improved chemical management practices. These changes are showing success, albeit with occasional setbacks. Mentions were made of a still insufficient demarcation of roles and responsibilities among ZDHC's departments and limited clarity around the identification of contact persons for stakeholders connecting to ZDHC from the outside. Overall, ZDHC's organisational setup is favourable and suitable for scale.
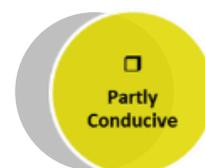
On staffing, the organisation has increased its size significantly and appropriately, from 17 employees in 2018 to 25 in 2020 (a 47% increase). ZDHC was meant to further build its capacity, but hires have been put on hold for the coming year due to the COVID-19 pandemic. Prior to this unplanned pause, ZDHC had successfully consolidated and somewhat expanded its skillsets. The three staff hires made using grant funds were dedicated to materials development, communications and marketing, and to stakeholder management. As such, they were consistent with the grant proposal and, by extension, supportive of PRAs in the Strategic Growth plan. The current staffing corresponds with an allocation of resources whereby focus areas and advisory groups accomplish most of the legwork, for instance in drafting guidance

documents.[17] However, key informants concur that the work would be more efficient and swift if the legwork was accomplished by ZDHC staff or consultants, under the supervision of the focus areas and advisory groups. Were the allocation of responsibilities to be reviewed to implement this second option, ZDHC would need to increase its in-house chemistry expertise or resort to consultants to have the competencies and bandwidth necessary to empower all of the work on the agenda.

Finally, ZDHC is transitioning from a phase of building its support systems and processes to maintaining or adapting them. The ZDHC Academy is a case in point: the programme was established in 2017, was upgraded with support from this grant in Year One, has adapted to COVID-19 with an increase online instruction, and is now poised for a further iteration as demand builds. Key informants describe a need to engage relevant industry educators in a sector analysis that can result in a more coordinated, better tailored response to workplace training that is also synchronised with post-secondary learning.

Areas that deserve close attention are communications and monitoring and evaluation (M&E). ZDHC's communications have become more polished and streamlined recently, notably with the publication of the 2019 Impact Report and the roll out of the Knowledge Base, a functionality on the website to assist users to address chemical management matters. Nonetheless a certain degree of confusion remains even among close collaborators. This is due to the organisation's complexity, with multiple moving parts and to shifting module and programme names. As a result, there is an uneven understanding of ZDHC's work among stakeholders. Internally, the overall vision for ZDHC, as imagined by top leadership, is not evenly understood by the staff, resulting in some inefficiencies and uncertainty.

As for M&E, data collection and KPIs currently do not meet contributor, board member, and external stakeholder expectations. Reporting has improved significantly in recent years, but it stays below standard: there have been various accounts of KPIs presented as simple numbers without denominators or explanations of significance and quality of change for ZDHC, at a strategic level. Impact reporting is also constrained by not already having a baseline upon which to compare today's data. Unfortunately, KPIs tied to adoption and process rather than to performance only go so far in showing progress towards impact and supporting evidenced-based decision-making. Claims made around performance, for instance on chemicals eliminated from the apparel supply chain, have been met with doubts around the methodology used to obtain this data, and thus spurred limited trust in the

> **"**
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> *In two years, ZDHC has gone from pretty much no data to insufficient data. Now at least we have some user and financial data to work with. We expect to start having a fuller suite of data to work with very soon.*
>
> *– ZDHC Governance*
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> **"**

claims. Several growth areas in ZDHC performance communications are: the creation of a dashboard mechanism to bring together high level KPI data as per the Strategic Growth plan, a data feed showing ZDHC's global market presence, and routine surveying of key stakeholder groups to understand perceptions regarding quality, cost thresholds, and uses.

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[17] In November 2019, ZDHC launched its Standard Operating Procedure document. It is designed to establish a unified procedure for the design and development of new projects. Despite the existence of this formal agreement on stakeholder participation, certain advisory group members are dissatisfied with the high workload they need to contribute to the programme.

7.2 Convening and Collaboration

Finding 11: Fundamentally, ZDHC is a convener. It has successfully increased its numbers of users, deepened and widened its geographical reach, enhanced convergence, and convinced chemical suppliers to get on board. The organisation has cast a wide net in its engagement with stakeholders, which has placed constraints on pace and level of ambition. The upcoming Leader Programmes are expected to counter this trend.

ZDHC is fundamentally a convener. Stakeholder engagement is an ongoing priority, and core to its functioning as reflected in its decision to hire a partnerships director. Collaboration is founded on the idea that partnership arrangements can yield efficiencies, complementarities and additional influence. ZDHC's collaboration with the Transformers Foundation offers a case in point. The Foundation is dedicated to influencing environmentally sustainable action in the denim textiles and fashion industry. It does so most demonstrably at its high profile Kingpins trade shows for denim supply chain actors. There, exhibitor requirements hinge on commitments to more sustainable chemical management.
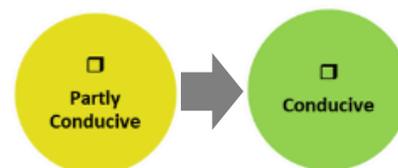
Growth in user patterns, illustrated in **Section 6.1 – Business Models**, is due to multiple factors, among which are grant supported convergence efforts, negotiations with stakeholder groups, and geographic expansion. Regarding convergence, grant outcome four, expectations to the mid-term have been met. Large brands, for instance Inditex, have agreed to harmonise their chemical assessment programmes with ZDHC's MRSL. This convergence reduces confusion in the industry and can have important leverage effects: it is believed that each large brand that converges with ZDHC brings a group of smaller brands in its wake, thus increasing the number of users and potentially of contributors. A promising collaboration has also been announced with the SAC, Textile Exchange and the Apparel Impact Institute (AII). This new partnership is expected to generate complementarities associated with programmes and tools, efficiencies associated with management, administration and fund development, and a pooling of investments in infrastructure and training. [18]

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> *Giving the chemical suppliers more voice in the governance of ZDHC is very important if we want acceleration. At the same time, my hesitation is that the chemical suppliers' voice might slow us down. The voice of the NGOs needs to be there too.*
>
> *– ZDHC Governance*
>
> "

As for integrating stakeholder groups, a major negotiation was accomplished with the chemical suppliers over the course of 2019 which ended with the agreement to collaborate with ZDHC, in exchange for an enhanced involvement in the organisation. Obtaining the chemical suppliers' participation was critical, as the success of the Gateway and of the Roadmap to Zero Programme as a whole, was dependent upon their engagement. As it stands, ZDHC is a brand-led organisation with a multistakeholder board set up and a multistakeholder programme. This

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[18] Aspects of this collaboration, announced September 17th, 2020, are set out in the following press release: https://www.roadmaptozero.com/post/like-minded-organisations-form-an-alliance-of-resources-for-the-global-value-chain?locale=en

combination is strategic, as brands possess the characteristics necessary to drive behavioural change across the supply chain: they have made public commitments, are visible to the public, and have sufficient market power to effect change. As for the multistakeholder board and programme, they allow for a pooling of expertise and shared ownership towards implementation of the Roadmap to Zero. However, this distribution of roles is not evenly understood among the stakeholders consulted and is a cause for concern for a majority of them, particularly as manufacturers and chemical suppliers are now a larger constituency in numbers than brands.

Drivers of Engagement

Most stakeholders engage with ZDHC for one of, or a combination of, the following reasons:

- They feel it is the right thing to do, for progress;

- The are concerned of what could be decided in their absence if they do not participate;

- They want to protect their company from risks; and

- They hope to benefit from a comparative advantage.

It is worth noting that the first driver is positive, based on selflessness, while the second and third ones are out of concern (and low trust, for the second one). The last one speaks to business interest and to the business case for sustainability.

Another factor contributing to the increase in number of users is ZDHC's geographic expansion into key production countries (East Asia, South Asia, Southern Europe). This expansion has been appropriate and is expected to augment both in depth, as ZDHC reaches deeper down the supply chain, and breadth, with a new project starting in Ethiopia. Translation of ZDHC's material into other languages is progressing. The website is currently accessible in seven languages. Guidelines and documents are now in the cue for translation following updates flowing from the release of the MRSL 2.0.

ZDHC's engagement strategy has prompted the organisation to cast a wide net: as it engages with brands and manufacturers, it encourages them to bring along their supply chain as well. This process has had an important multiplier effect. The tactic to "build it and they will come" has made ZDHC an inevitable player in better chemistry in the apparel and footwear industry: as a result, non-contributors increasingly inquire about the organisation, follow its guidelines, and ask to join. However, while ZDHC is actively in contact with different NGOs (ChemSec, SAC, Open Apparel Registry [OAR], etc.), they do not contribute to the programme, which various stakeholders have pointed to as a risk for critical thinking and accountability.

The strategy of the wide net has led to an increase in the scale of ZDHC's influence, results, and contributorship, and has brought buy in from many quarters. Yet, there have also been disadvantages. For instance, the focus areas and advisory groups are opened to all contributors and are highly democratic. This improves ownership but has slowed the pace of work in some instances. There is concern for the potential that ZDHC play to the lowest common denominator of interests pertaining to sustainability, as not all contributors are equally motivated and acting on the basis of the same drivers, as described in the textbox above.

Multiple stakeholders pointed to a dilemma related to whether ZDHC should run with the committed stakeholders or walk with a larger group of industry actors. The former allows for

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> *At the moment, if you are a contributor it is considered good per se. Yet, some brands don't even know where their products are tinted or printed. Those that are good are getting frustrated by the lack of accountability.*
>
> *– External Stakeholder*
>
> "

more ambition but less ownership, while the latter involves wider engagement but risks turning away actors that are more ambitious.[19] Now that ZDHC has defined a contributor journey, whereby contributors' fees depend on their meeting certain programme scoring thresholds, it appears that the organisation has opted for the first option. Indeed, it is believed that the Leader Programmes will have contributors identifying targets and displaying progress towards them, thus hardening commitments and sharpening accountability relationships that go with them. This should increase the pace at which ZDHC moves forward. A system of probation for contributors was also suggested by diverse stakeholders, with either an onboarding or an exit conclusion. A sign of progress for the organisation would be if supply chain actors with more ambitious targets in terms of sustainable management of chemicals were to join ZDHC.

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[19] Greenpeace pointed to the risk of turning away ambitious actors, or to hold them back, in its 2018 report *Destination Zero: seven years of Detoxing the clothing industry*, as it encouraged ZDHC to "[set] up a system which does not hold back leaders from pursuing best practice, while others are encouraged to participate and make progress."

8. Long-Term Value

Two criteria under Impacts and Sustainability were selected and examined in relation to the grant provided to ZDHC: environmental and financial sustainability. The review also assessed the work of ZDHC in terms of scalability using one criterion: scale-up. **Table 8.1** represents the progress accomplished regarding all three criteria, they are then discussed below.

Table 8.1: Overall Ratings – Long-Term Value

Impacts and Sustainability rubric	Harmful	Unconducive	Partly Conducive	Conducive	Thrivable
E3. Environmentally sustainable business models & practices			Partly Conducive		
E4. Financial sustainability		Unconducive →		Conducive	
Scalability rubric					
F1. Scale-up: Practical viability at larger scale			Partly Conducive →	Conducive	

8.1   Environmental Sustainability

Finding 12:   **The grant has helped ZDHC in setting up the systems and processes necessary to increase and promote environmental sustainability by minimising the adverse impacts of toxic chemicals on the environment. Hurdles standing in the way of environmental sustainability are: tracking stakeholder compliance with standards, ensuring that compliant supply chain actors are rewarded by the market, and certifying suppliers in accordance with existing regulations.**

ZDHC's work has so far been situated at the level of safer chemistry, minimising the use of toxic chemicals in the apparel supply chain. As discussed above, ZDHC's systems and processes have strong potential to contribute to limiting the industry's adverse impacts on the environment, however this potential has been actualised to a minimal extent, so far. Three key elements have been identified in the review that, acted upon, would lead the apparel and footwear industry to meet sustainability thresholds. Each one is presented below, alongside a review of progress achieved.
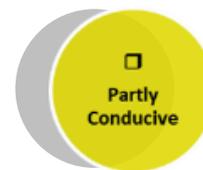
The first of these concerns tracking compliance with ZDHC standards in the supply chain, and making such data visible. As the data would be visible, brands could use it for their marketing and hopefully increase their sales, as this remains a bottom-line priority. A wide array of stakeholders indicated that this element has been a shortcoming within ZDHC, as it is so far not possible for contributors to know which industry actors are ordering and using formulations that are compliant with standards, and in what proportion. As

it stands, it is not possible to track contributor progress against commitments over time. This element is expected to be rolled out as part of the different Leader Programmes, but is not in place as yet.

> "
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> *If the brands don't translate the conformance pyramid in their own improvement, if they don't care about the KPIs, it remains the lowest bidder that wins. Unless you have the KPIs as a public commitment to improve. Improving conformance can be a strong driver, but it currently is not.*
>
> *– External Stakeholder*
>
> "

Second, environmental sustainability within the apparel and footwear industry hinges on the market rewarding compliant actors. In this scenario, chemical suppliers and manufacturers that comply with ZDHC's standards and follow its guidelines should receive more orders from brands than those that do not comply. The University of California, Berkeley, study on the effectiveness of fashion sustainability tools describes good sourcing practices are the lynch pin of transformative change towards environmental sustainability.[20] Yet, stakeholders at different levels within the supply chain as well as outside of it warn that compliant actors are so far not rewarded by

the market, thus providing little incentive for actors to improve their practices. Leader Programming is indicated here as well, along with public disclosure reporting.

Finally, consulted stakeholders point to a third element that would enhance sustainability in apparel: stronger regulation around chemical management practices. ZDHC's engagement with policymakers is very limited, as lobbying is not part of the organisation's remit. As far as national limits and existing regulations go, such as the European Ecolabel or the Nordic Swan, the Gateway currently does not display compliance of formulations with them, for legal reasons.[21] An option would be that the Suppliers to Zero Programme provides certification only to chemical suppliers that meet national standards, this is under consideration. Were this done, it would allow ZDHC to leverage regulations, assert its position as a one-stop shop for its users, and ultimately ease the brands' path towards environmental sustainability.

8.2 Financial Sustainability

Finding 13: ZDHC's financial growth has been steady since 2016. An increasingly pronounced revenue mix of brand memberships and service transaction fees make ZDHC more resilient than it was at the grant's outset. A COVID-19 racked economy notwithstanding, prospects for growth are strong with a shared vision, a fully assembled business model, an array of support services on the ready, and strategic and cost/efficiency conscious collaborations in development.

The core support grant agreement contains no specific expectations around financial sustainability, only references to an intent to strengthen ZDHC's organisational capacity for the purpose of accelerating and scaling its impact on the apparel and footwear industry.

Unconducive → Conducive

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[20] Lollo, N., & O'Rourke, D. (2020)

[21] ZDHC could not verify compliance itself with its current processes, but chemical suppliers' claims could be displayed as unverified.

In the first five years of its life, ZDHC has shown steady growth. Incomes have risen by 171% between 2016 and 2019. In the past two years, the number of staff on board has risen from 17 to 25. At the time of grant's inception, ZDHC reported a general reserve sufficient in size to sustain the organisation for six months. By the close of 2019, the reserve was reportedly large enough to support operations for 12 months.

Initially, ZDHC's funding requirements were met exclusively by brands. Increasingly revenues have come from a more diverse range of contributors, from grants, and from transaction fees. **Figure 8.1** shows changes in the magnitude of income and in the revenue mix between 2016 and 2019. Over the three years, ZDHC revenue derived from transaction fees, i.e. mainly payments made for a variety of Gateway services, rose from 0% to 30%. In 2019, €1,472,000 was raised for ZDHC in this way.

Figure 8.1: Evolution of ZDHC's Revenue Mix

ZDHC Revenue Mix 2016-2019
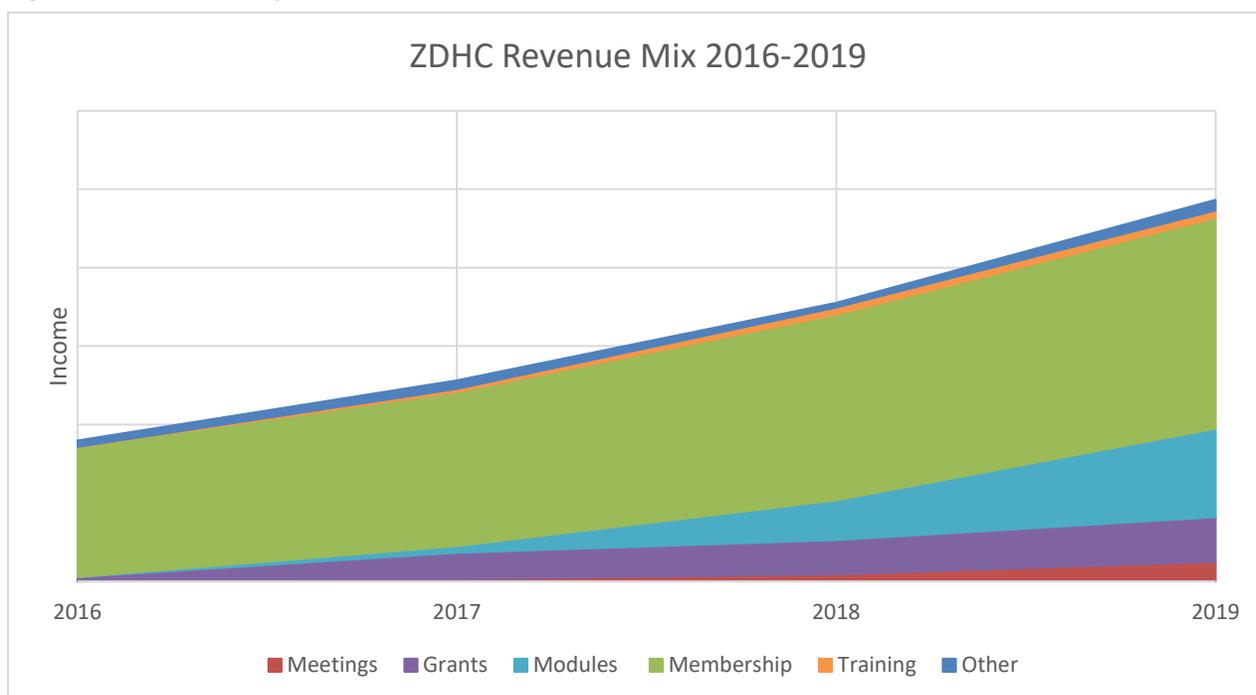
Source: ZDHC Financial Reports

Key informants with knowledge of ZDHC's financial trajectory favour the organisation reducing dependency on brand contributions and express support for transaction-based revenue. That said, across the supply chain, caution is advised over the pricing of services. The danger is that the costs of participation will suppress manufacturer and chemical supplier participation in the programme, particularly if pricing formulas are not set out in a transparent way. Sensitivity to pricing surfaced with the following rhetorical questions, "Is ZDHC a profit-making business or a foundation? Does it not get grants? Why is it charging so much?" One solution could be for costs associated with Gateway services to be distributed between the payer of the Gateway service and the service provider (e.g. the water testing laboratory); in this scenario the latter would be charged through licensing arrangement. In the current pandemic with production slowdowns, exceeding pricing thresholds is a particular concern.

> *Transaction action fees make sense to the extent that they are imposed on services that are perceived to add value.*
>
> *– ZDHC Governance*

In the past year, ZDHC has ceded some of its services to third party vendors (e.g. the Performance In-Check service) with the argument that the measure was necessary to ensure capacity to handle user volume. This has caused some to worry that ZDHC may compromise its revenue generating potential if it is not careful.

Training revenue has remained flat over the period and is seen as a potential growth area for ZDHC pending further development of the Academy business model. The same is true for grant income. To date, ZDHC has not ventured much beyond its funding relationship with the Laudes Foundation.

Thinking to the future, informants point to two linked sustainability pathways – one focused on contributorship, the other on transaction-based revenue. ZDHC's spending profile will change as the final elements of the ZDHC business model – the Gateway, the tools, Leader Programme design, innovation platform development, etc. – fall into place. Further, as ZDHC builds its strategic collaborations with other key actors in sustainable fashion, there is to be a pooling of resources. Both trends bode well for ZDHC's financial sustainability.

> *Now we have tools in place, we need to really push brand entry.*
>
> *– ZDHC Governance*

How the current cohort of signatory brands will weather the COVID-19 pandemic is to become clearer in the coming months. Brand informants indicate that sustainability budgets for 2021 will take a hit, at least across some brands. COVID-related struggles will also affect appetites among those considering a commitment to the Roadmap to Zero Programme. ZDHC's move to create the Friends of ZDHC category may be the answer for some wanting to engage. With this "taste testing" option, brands get access to all the tools but remain outside of the formal Roadmap process and, as such, are not counted as part of ZDHC's impact on the supply chain. There is some ambivalence about the merits of the "Friends" strategy, however. Some worry that, without careful management, it may work against ZDHC's push to broaden its base of brand change makers.

8.3 Scale-up

Finding 14: **ZDHC is on the correct trajectory to contribute to wider system shifts. Its systems and processes are designed to scale, and it has begun expanding both into new regions and deeper into the supply chain. Increasing brand contributorship and engaging with other sectors are strategies yet to be actualised and promise to contribute significantly to ZDHC scaling up.**

In its theory of change, ZDHC has situated its purpose as a response to the systemic challenge of "the widespread use of hazardous chemicals in the apparel and footwear industries [which] causes harm to consumers, workers and the environment." The organisation aims to "improve chemical management", and to do so "across the full value

chain" of the industry, thus leading to "improved working conditions and reduced environmental harm."[22] With the support of the grant, ZDHC is making positive strides towards these system shifts. It has put in place a suite of tools and processes that allow for improved chemical management and is reaching multiple levels in the supply chain, including deeper tiers beyond direct suppliers. The potential impact of ZDHC is great. However, claims around improved chemical management and reduced environmental harm are still to be grounded in a transparent methodology and substantiated with contextualised KPIs. It is believed that

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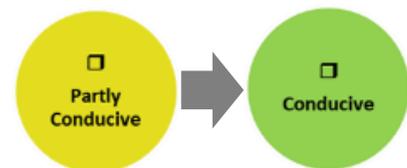
[22] ZDHC (2017) ZDHC Strategic Planning and Implementation Support Grant - Report to Laudes Foundation, p.12

the soon to be fully rolled out Leader Programmes, for brands, manufacturers and chemical suppliers, will lead supply chain actors to making and upholding commitments to better chemistry, thus helping ZDHC take a leap forward in terms of system shifts. When this is done, and when Leader Programming has been up and running for several years, it will be time to turn towards analysing changes in working conditions: until then, it is too soon to expect an impact in this regard.

As for ZDHC's scalability, the organisation has made progress through the scaling up of key dimensions, while some have remained in the realm of potentiality. There are four such dimensions assessed below: tools and processes, geographic reach, stakeholder engagement, and sectors. On the former, over the period of the grant, ZDHC has continued to establish and refine its suite of tools and processes, composing a coherent toolkit that can cater to the needs of an ever-increasing number of users. To date, grant activities identified to the workstream "Strengthen Organisational Capacity" have been particularly important in this regard, as the tools that have been developed are now mostly set up and ready to be scaled. There is however potential for drift. Given the dynamism of the sector and the breadth of opportunities, there is a need for careful discernment to ensure that activities moving forward build on the core competencies of ZDHC and contribute to strengthening existing tools and processes. Contributor expectations need to be managed accordingly to generate an understanding and to defuse frustrations.

> " *Some more regional focus would help, we can go deeper in the different regions, invite more brands that are in the region. This will help achieve scale.*
>
> *– Value Chain Affiliate* "

In terms of geographic reach, ZDHC has expanded into new regions, with a direct presence in three of them and a project launched in a fourth region. Activities identified to grant workstream "Deepen Geographical Support" have allowed ZDHC to increase the width of its ecosystem and to deepen its reach in the supply chain. Having a culturally attuned presence in country with a growing body of language-appropriate documentation has favoured the integration of smaller actors that would otherwise have stayed under ZDHC's radar. Geographic expansion remains in its early stages; an increase in both spread and depth is planned.

Stakeholder engagement is another feature in ZDHC's efforts to increase the scale of its work. While the organisation has increased significantly its number of users (Gateway, Academy, Implementation Hub), its number of contributors has not followed the same path. In particular, over the past two years, ZDHC has not reached out to build its cast of signatory brands, hence a small increase in brand contributors. With all the elements of the ZDHC business model coming on stream in the coming months, it is time to change that. Large brands and retailers operating in production countries where ZDHC is building its presence (e.g. India) represent high potential for growth, as does the new collaboration with the SAC, Textile Exchange, and the AII. Augmenting the number of

> " *To reach targets, don't branch out in too many directions, keep improving the core tools, educate people about them, increase engagement, don't get distracted by other initiatives and priorities, don't go in different directions because there is potential funding involved. Stay focused.*
>
> *– External Stakeholder* "

participating brands comes with a multiplier effect, as each brand engages its supply chains in better chemistry, thus generating more Gateway traffic with increasing economies of scale.

Lastly, and related to the previous dimension, is the possibility for ZDHC to engage other industries, such as home textile (adjacent to apparel and footwear) and the automotive industry (large user of leather products). There is potential for lateral communication and engagement through supply chain actors and solution providers that operate across sectors, which would simplify ZDHC's entry into new industries. While this expansion could considerably increase ZDHC's contributorship and Gateway traffic, it could also limit the cross-contamination of hazardous chemicals from other industries into the apparel and footwear sector. Another option would be for ZDHC to sell (or rent) its model and its processes to existing bodies, rather than expanding its own scope. Again, ZDHC would need to carefully assess the potential benefits of such scaling and ensure that the draw on the organisation's core competencies is manageable.

To date, grant activities identified to grant workstream "Demonstrate the enabling role of chemistry" have been less integral to scale-up, but will be more important in the second half of the grant in testing and showcasing the viability of the ZDHC business model (or parts thereof) in different parts of the world. Further work on circularity could also open a whole new realm of opportunity and potential scope of work for ZDHC moving forward. While the last workstream, "Drive continuous improvement across the industry", has yet to contribute to scaling, it is likely that these activities come to the forefront during the second half of the grant. In particular, consumer-facing transparency is a strong impact enabler, as discussed earlier. Also, as the pool of supply chain actors widens, so too does the talent pool and the scope for innovation both as it pertains to safer and to greener chemistry.

9. Conclusion and Recommendations

9.1 Conclusions

Two years into the Laudes Foundation core support grant to ZDHC, the MTR describes a mostly good news story. In 2018, ZDHC was maturing from a "start-up" with an ambitious agenda, limited in-house staffing, a largely undifferentiated organisational structure and early-stage business systems. At the mid-term, ZDHC is showing acceleration and scalability on its sustainable chemistry mission. Strengthened by the increased presence of in-house expertise and by more focused, inclusive and geographically distributed working teams, ZDHC is enabling actors in the apparel and footwear industries to implement chemical management best practice and advance toward zero discharge of hazardous chemicals.

ZDHC is making these strides through a concerted engagement with actors along their industry supply chains, coalescing around a unitary chemical management system, and through an array of enabling collaborations with industry associations, non-state actors pursuing sustainability mandates and, to a lesser extent regulators r. It has, or will have in a matter of months, the guidelines, tools and supports, as well as the programming in place to scale up. Innovation, including an exploration of chemical circularity and new transparency and tracing technologies, are poised to give additional impetus to this change. It is a palpable moment wherein efforts hitherto concentrated on assembly and early use can finally give way to full-on implementation and systems change as envisaged in the grant design. What ZDHC is challenged by, and can address most properly as implementation scales up, is the assurance of a business case.

On Design and Implementation

Laudes Foundation's grant has been mostly conducive to an acceleration and scaling of ZDHC's signature Roadmap to Zero Programme. Funding has given ZDHC financial leeway to pursue priorities named in its Strategic Growth plan. To date, investments have been instrumental in readying the guidelines, tools and Leader Programming (brand, manufacturer and chemical supplier) for the roll out expected over the remainder of this grant period. The funding relationship between ZDHC and Laudes has been collegial, drawing on a store of mutual trust built through previous project experience. Despite there being a less than perfect strategic alignment on the specifics of circularity in chemical management, the two organisations do share a substantive interest in systems change that drives toward sustainable chemistry in the industry.

Laudes Foundation's intent to provide "core support" to ZDHC, in the truest sense of that term, has been confounded by the choice of accountability mechanism used in the funding agreement. Allegiance to a programme logframe has, in effect, trained grant resources toward the achievement of predetermined programme targets across a wide scope of ZDHC's mandate, therein constraining its ability to spend on core functions, and with the discretion that permits adaptive management. Furthermore, what the logframe itself asks of the ZDHC team working under the grant is in places unrealistic. The difficulties noted here have been partially addressed in a contract amendment, but they bear revisiting in the wake of the MTR. The core support grant designation and the programme log frame remain in place. There is an opportunity at this juncture to share more widely the existence of this grant within the team, to (re)define shared expectations over its use, and to revisit how best to account for the grant in ZDHC's monitoring, adaptive management, and reporting routines. The impetus for doing so is accentuated with the knowledge that this grant can be expected to be Laudes Foundation's last to ZDHC.

On Intermediate Outcomes

Regarding the *pre-conditions* for desired change, ZDHC's progress towards safer chemistry occurs in an industry environment that favours and resists, in more or less equal measure, efforts toward a zero-discharge future. If ZDHC can scale a business model that rewards use of chemical management best practices for all stakeholder groups along the supply chain – brands, manufacturers and chemical suppliers, then a systems change will advance.

At the time of the grant's launch in 2018, key *levers* required to support that system change in the supply chain were less developed and unconducive to acceleration and scaling. At the mid-term, progress has been made in creating a business model, in developing a practice of innovation, and in building transparency and traceability. On all counts these levers are now partly conducive with good momentum for continued development.

- ZDHC's *business model for sustainability* is more complete and coherent than it was in 2018. Stakeholders signal buy-in along the supply chain toward the ZDHC MRSL with increasing utilisation of the Gateway chemicals data base for better chemicals management. At the same time, wavering commitments among brands to buy products made from better chemistry, continuing complexity regarding the participation of certifying bodies, and the lingering question of whether removing hazardous chemicals from the industry makes business sense each challenge ZDHC in the immediate term.

- *Innovation pilots* carried out to date have generated valuable insights on process and on substantive chemistry matters, but urgency surrounds the task of addressing the widely perceived innovation gap. The task calls for triage, a convening of relevant stakeholders, studies, and the development of innovative solutions. Within the realm of innovation, ZDHC's newly released reflection on circularity has instigated a discussion that waits to be harnessed for agenda setting purposes.

- Regarding *transparency*, ZDHC Gateway tools have made it increasingly possible to aggregate and share data across the apparel and footwear supply chain and to disseminate it publicly. The protocols for doing that are still being worked out as the latest ZDHC Leader Programming iteration at the brand level continues through its formative stages. A clear commitment to public disclosure is sought to build confidence in the ZDHC business model. Meanwhile, research on block-chain transparency and on source labelling are proceeding with implications for ZDHC as yet largely uncharted.

ZDHC is showing new strength in its *organisational and network effectiveness*. Its structure and its operational capacity have each undergone a considerable change since 2018 and in the process have become more conducive for the task of accelerating and scaling ZDHC's Programme. While brand driven, ZDHC's board and programme are increasingly multistakeholder in their set up and managing a variety of tensions that go with that. With its Strategic Growth plan in hand, ZDHC has a map to chart a way forward. What it still lacks is good data to support evidence-based decision-making, though this too is improving.

Over two years, ZDHC has further developed its capacity to bring diverse industry actors together in search of ways to collaborate. A strong performance in *convening and collaboration* has been essential for ZDHC to position itself so centrally and with such authority as a change maker in the supply chain. Moving forward, it is critical that the driving force behind ZDHC remains the brands, while all supply chain actors collaborate towards optimal implementation of the programme. With the breadth of engagement that it now has, ZDHC has to ward against inertia and mission drift.

On Long-Term Value

ZDHC's journey is toward a greater *environmental sustainability* – protection of consumers, workers and our planetary ecosystems. Safer chemistry is its current focus and a departure point for exploring more widely. If ZDHC's strategic commitment holds, the organisation will progress further into the realm of sustainable chemical management with the emergence of the circular economy. For now, however, the organisation remains pre-occupied at the initial stages of cleaning up the chemistry of an industry that has been haphazardly regulated. Appropriately, its efforts are trained on securing standards and verification, and on market dividends for best practice chemical management. With environmental sustainability, a third area would be for ZDHC to leverage existing policies and regulations, thus increasing the Roadmap to Zero's relevance and tool usability.

Regarding ZDHC's own *financial sustainability*, important gains have been made. At the mid-term, the organisation has shifted its reliance away from brands, both programmatically and financially. With this, prospects have shifted from unconducive to conducive vis-à-vis acceleration and scaling. On the financial side, ZDHC has done well to increase its revenue share from Programme transactions. Now, set to expand the number of brand members and accept with them additional supply chain actors, contributorship volumes will increase, as will transaction fee revenue. At the same time, investments have largely been made to get the business model up and running. Looking forward, expenses will be less pronounced. Additional dividends on the revenue and expenses side will come from strategic level collaborations currently in formation.

Overall, ZDHC's *scale up* picture is bright at the mid-term. The components for this picture are: ZDHC's diversifying financial base, the tools and processes now ready to support its business model, the organisation's deepened presence in production countries, and ZDHC's enhanced capacity to engage stakeholder groups deep into the industry's supply chains. A key priority to activate the potential described here is brand recruitment and orientation. And key factors to monitor, with caution, as these scale up components are implemented are: a) dampening influences on stakeholder engagement as a result of transaction pricing and, b) distraction amidst all the dynamism of systems change from ZDHC's core mission and core competencies.

9.2   Recommendations

The recommendations below have been structured to address overarching themes, as per the main dimensions of the ERS. A table accompanies each recommendation, making reference to the principal sections to which they respond, identifying target recipients, and noting the urgency level with which they should be addressed.

Regarding Design and Implementation

Recommendation 1:   To reconcile the less restrictive "core support" designation of this grant with the use of a more restrictive, programme focused accountability framework, Laudes Foundation and ZDHC should review the original design document, the amended agreement of 18 March, 2020, and these MTR findings with a view to establishing a fresh amendment delineating the best possible focusing of grant resources for the remaining two years. As part of this, the parties should agree on a reporting framework that allows ZDHC to document: a) grant supported activities and results that are within the sphere of influence of the grant to produce, b) contributions made with grant resources toward the Priority Resource Areas in the ZDHC Strategic Growth plan.

FACTOR	GUIDANCE
Reference	4.1 Right Design; 4.4 Proper Monitoring and Adaptive Management
Recipient	Laudes Foundation and ZDHC
Urgency	High

Recommendation 2:   Laudes Foundation and ZDHC set the amendment discussion outlined in Recommendation 1 within the context of an exit strategy, wherein there is: clarity on intent to exit the partnership, a discussion of ZDHC's strategic need for grant funding, post 2022, to support its onward trajectory toward organisational and financial sustainability, and agreement on steps to be taken by Laudes Foundation and ZDHC over the coming two years to position the latter for a smooth transition.

FACTOR	GUIDANCE
Reference	4.1 Right Design; 4.2 Alignment
Recipient	Laudes Foundation and ZDHC
Urgency	Medium

Recommendation 3:   With an amended agreement in place, ZDHC review its grant management arrangements with a view to: a) enhancing manager level inclusion in decision-making; and b) scope for adaptive management practice in grant utilisation.

FACTOR	GUIDANCE
Reference	4.1 Right Design; 4.3 Good Implementation; 4.4 Proper Monitoring and Adaptive Management
Recipient	ZDHC
Urgency	High

Regarding Intermediate Outcomes

Recommendation 4:   It is critical that the Leader Programmes be fully rolled out and that this leads to industry actors making and upholding commitments to safer chemistry. Procurement practices in the supply chain should be monitored. Incentives should be considered to increase the likelihood that compliant actors are rewarded by the market. This will avoid ZDHC playing, or being perceived to play, to the lowest common denominator of interests pertaining to sustainability.

FACTOR	GUIDANCE
Reference	5.1 Changing the Narrative; 6.1 Business Model for the Roadmap to Zero Programme; 6.3 Transparency; 7.1 Organisational and Network Effectiveness; 8.1 Environmental Sustainability; 8.3 Scale-up
Recipient	ZDHC
Urgency	High

Recommendation 5:   A summit of accepted certifying bodies should be called by ZDHC to identify issues, opportunities and solutions related to assessing MRSL conformance. In preparation for such, ZDHC should gather issues from key stakeholders and build an agenda accordingly. The meeting should be led externally by a trusted, skilled, subject-knowledgeable facilitator. There should be a focus on issue resolution with appropriate documentation.

FACTOR	GUIDANCE
Reference	6.1 Business Model for the Roadmap to Zero Programme
Recipient	ZDHC
Urgency	Medium

Recommendation 6: Once the assembly of the ZDHC business model for sustainability is complete and fully operational, ZDHC should repeat the business case study in a bid to demonstrate the business case for industry stakeholders engaging in the ZDHC Programme to remove hazardous chemicals from the supply chain. This study should be done externally and adapted from the original investigation.

FACTOR	GUIDANCE
Reference	6.1 Business Model for the Roadmap to Zero Programme
Recipient	ZDHC
Urgency	Medium

Recommendation 7: Drawing on its pre-competitive, multistakeholder engagement experiences to date, ZDHC should position itself with a new innovation mechanism to expedite the chemical substitution process and facilitate the entry of new processes and guidelines that support chemical management best practices. Courses of action suggested for ZDHC are consistent with the two studies noted above and can be summed up as follows:

- Triage the candidate list for the best combination of high impact and good prospect substitutions;

- Pose challenges – make calls for innovations and research;

- Convene multistakeholder working groups to review options; and

- Bring the most scalable options into the supply chain.

FACTOR	GUIDANCE
Reference	6.2 Innovation
Recipient	ZDHC
Urgency	Medium

Recommendation 8: Having now initiated a discussion among stakeholders with its circularity study, ZDHC assess: a) what activities and deliverables are required to operationalize the areas of work identified as points of convergence with the Roadmap to Zero programme, and b) which stakeholder organizations should be engaged in the effort and how in order to engender uptake of the roadmap by industry as per the relevant grant outcome. This exercise should be done with a reference to recommendation 1, so as to ensure that the work set out in this planning exercise is appropriately integrated within the amended agreement with Laudes Foundation.

FACTOR	GUIDANCE
Reference	6.2 Innovation
Recipient	ZDHC
Urgency	High

Recommendation 9: Efforts enabling greater transparency in the supply chain and with consumers should increase progressively as the grant progresses, as per the relevant anticipated outcome. ZDHC will need to refine its processes in this regard, steward its contributors in their journey towards transparency, and provide incentives to optimise uptake.

FACTOR	GUIDANCE
Reference	6.3 Transparency
Recipient	ZDHC
Urgency	Medium

Recommendation 10: ZDHC should continue its transition towards becoming a formally structured organisation, with more demarcation of roles and responsibilities among teams and clear identification of contact persons on different topics.

FACTOR	GUIDANCE
Reference	7.1 Organisational and Network Effectiveness
Recipient	ZDHC
Urgency	Medium

Recommendation 11: The division of tasks between advisory groups and the ZDHC team should be reviewed for optimal performance. This may require that ZDHC produces the outputs itself, under the direction of the groups. It would be important to preserve the advisory group members' sense of ownership over outputs. For this more proactive stance, ZDHC would need to increase its chemistry competencies and bandwidth.

FACTOR	GUIDANCE
Reference	4.3 Good Implementation; 7.1 Organisational and Network Effectiveness
Recipient	ZDHC
Urgency	High

Recommendation 12: ZDHC should review its communication strategy so as to clearly represent and socialise the organisation's overall vision to stakeholders, both internally and externally. This would clarify expectations and contribute to increased effectiveness and efficiency.

FACTOR	GUIDANCE
Reference	4.5 Good Communication; 7.1 Organisational and Network Effectiveness
Recipient	ZDHC
Urgency	High

Recommendation 13: ZDHC's M&E system needs refinement. In particular, data should be contextualised so that it shows progress in relation to global market parameters and/or to aspirational goals. Covid-19 fall out across the supply chain should be tracked and reported on with a view to learning about supply chain resilience. Improvements could take the form of a dashboard mechanism for high level KPI data as per the Strategic Growth plan, a data feed of ZDHC's global market presence, operational research studies related to the functioning of the Roadmap to Zero Programme (e.g. monitoring the impact of service pricing on industry users of the Gateway). The methodology used to obtain and aggregate data used for claims around chemical management should be reviewed and clarified, so as to spur trust.

FACTOR	GUIDANCE
Reference	4.4 Proper Monitoring and Adaptive Management; 7.1 Organisational and Network Effectiveness
Recipient	ZDHC
Urgency	High

Recommendation 14: ZDHC should ensure that its driving force remains the brands, as they have the responsibility and the characteristics necessary to drive behavioural change across the supply chain. At the same time, in a dynamic systems change process such as this, the board and the Roadmap to Zero Programme should continually strive to have an adequate multistakeholder set up which allows for a pooling of expertise and shared ownership over the programme. Similarly, ZDHC should continually assess how NGOs and other professional bodies should best contribute to the programme through their expertise and of their capacity to encourage ambitious progress. The distribution of roles should be communicated to key stakeholders to ensure a shared understanding.

FACTOR	GUIDANCE
Reference	7.2 Convening and Collaboration
Recipient	ZDHC
Urgency	High

Regarding Long-Term Value

Recommendation 15: In order to reinforce ZDHC's status as a one-stop-shop and increase usability, it should find a way to certify only suppliers that meet existing regulations, e.g. regional and national standards.

FACTOR	GUIDANCE
Reference	8.1 Environmental Sustainability
Recipient	ZDHC
Urgency	Medium

Recommendation 16: Further convergence, geographic expansion, capacity development, and translation of important documents are warranted for ZDHC to increase the size of its ecosystem as well as its attraction to industry actors. The collaboration with the SAC, Textile Exchange and the AII could be leveraged for this purpose.

FACTOR	GUIDANCE
Reference	7.1 Organisational and Network Effectiveness; 8.3 Scale-up
Recipient	ZDHC
Urgency	Medium

Recommendation 17: In order to increase ZDHC's scale, and thus effect system shifts, an augmentation of its number of contributors is warranted. ZDHC will need to assess any impetus to chart new programming directions that may come through this expansion, and ensure that any new venture brings net strategic value and builds on ZDHC's core competencies.

FACTOR	GUIDANCE
Reference	8.3 Scale-up
Recipient	ZDHC
Urgency	Medium

9.3   Lessons Learnt

The MTR of Laudes Foundation's work with ZDHC holds important lessons for the foundation as it further develops its partnership-based grant-making for systems change. These are highlighted below under the headings: Partnership; Grant Modality; and Supply Chain Dynamics.

Partnership

For a granting body, the stakes are high when using a core support granting mechanism. With this form of support, the granting body is truly counting on the grantee to deliver on the granting body's mission and mandate. The granting body needs these grantees to do the work and to trust that they will deliver; having been sought out for being among the most suitable for doing so. There must be a high degree of mutual trust and mission alignment, a good measure of confidence regarding the grantee's organisational capacity and financial stewardship, and a compatible accountability mechanism to cover the transfer. Typically, the accountability mechanism for a core support grant is not restricted, rather it is open to a range of investments most especially those that strengthen or reinforce organisational competencies required for the grantee to deliver on its mission. To get the best out of a core support agreement, the parties chart out how the granting body-grantee partnership will draw on the best that each party has to give in bringing about the desired change. It is a dynamic and iterative relationship until the time it is over. Up front clarity on roles and responsibilities, on working principles, and on an exit strategy is paramount. Shared expectations on reporting are important too – not simply to meet funder accountability expectations, but to help the funder deliver on its mission.

Grant Modality

When preparing a programme or project results logic model or log frame, it is important to map the connections between activities and outcomes from a single vantage point. If activities are to be written from the vantage point of a grant holder, the rest of the results chain should be crafted from the same perspective. With that, there are four variables that need to be in sync to get a realistic performance framework: time, resources, reach, and results. Hypothetically, if resources are spread across the whole scope of a programme, then associated results might be splayed a "mile wide and an inch deep". By contrast, if you concentrate resources within a narrower band of programme activities, the results may go deeper. Funding organisations like to see how their grant contributions are supporting transformative change. This can be shown through some kind of "crosswalk" that relates grant results to larger programme or organisation results. The key point here is that it is not appropriate to have responsibility for outcomes occurring at the larger programme or organisational scale assigned to those managing a grant set within that scale, at least not without a careful assessment of the above-mentioned variables.

Supply Chain Dynamics

In a system change design process involving supply chains, three key variables demand careful attention: shared commitment to a desired future, a pathway to get there, and a set of incentives, rewards and assurances to keep the process dynamic. In addition, across these variables, quality communication is key.

ZDHC experience tells us that critical ingredients for a supply chain change dynamic are: a shared vision and an aspirational standard, a process map to guide, leader programming to incentivise performance, brand engagement with their supply chains, and a flow of verified data and capacity support to help stakeholders along the chain make wise decisions. The experience tells us that, while consumer appetites ultimately drive brands, NGOs have a big role to play in piquing the social conscience of shoppers and tempering the overwhelming influence of price on choice. An important nuance brought forward by the ZDHC experience is that there is scope to make the flow of the supply chain change dynamic two-way. In this scenario, manufacturers and chemical suppliers do not just respond to the requirements of those higher up the chain, but take advantage of the opportunity to differentiate themselves from their peers and market that difference to attract new buyers. This adds an additional layer of dynamism to the change process.

Additional Guidance

The insights presented are distilled from the MTR as a whole. They are ideally considered in light of the analysis and recommendations presented in the review report.

Readers are encouraged to consult the report in its entirety.

Appendix I.   List of Findings

Finding 1:   For systemic impact, the grant has targeted the right organisation at an opportune time. Grant design is geared to accelerating final assembly, launch, refinement and scale up of ZDHC's holistic programme. High yield activities support relationship building and incentivisation across the supply chain, convergence around a unitary Manufacturing Restricted Substance List (MRSL), geographic expansion toward production countries and the development of enabling supports. At the mid-point, several activities are yet to show yields, but all are relevant and showing developments that are supportive to programme outcomes. Regarding the modality of the grant, there is an inconsistency between its "core support" designation and the use of a programme log frame with outcome related deliverables. One consequence of ZDHC's commitment to a logframe is a reduced scope for adaptive management, a feature normally valued in a core support mechanism.

Finding 2:   Grant activities align substantially to ZDHC Priority Resource Areas in its Strategic Growth plan. By contrast, alignment of the grant design to the strategies of the Circular Fashion Programme that issued the support hangs on a strand of activities that are of secondary importance to ZDHC. Today, alignment in relation to Laudes Foundation's current strategic direction is even less assured.

Finding 3:   Grant activities build on the results of previous grants. Implementation compares favourably to the grant's indicative spending plan, though in some instances, results targets associated with that spending are unrealistic. Quality personnel have been brought into strategic roles, though in-house chemicals expertise remains at a premium. Operational efficiencies can be linked to personnel deployment and communications upgrades. Constraints in grant implementation are largely synonymous to those for ZDHC as a whole; most pertain to the handling of the COVID-19 pandemic.

Finding 4:   Grant data collection and reporting is appropriately referenced to output and outcome targets, and the narrative accounts are rich with intent to back results claims with evidence. The grant "results story" in the end of year monitoring reports is obscured by a narrow referencing to the grant agreement's disbursement schedule and by discontinuities in the results log frame.

Finding 5:   Dedicated staffing for grant reporting has been instrumental to the development of board reporting and to the widely disseminated ZDHC Impact report. Grant resources have also been ploughed into a publication targeted at audiences associated with the fashion supply chain and potentially able to influence detox related commitments. The largest constraint on good communication has been the availability of quality data.

Finding 6:   In the context of chemical management, ZDHC has successfully continued work to convert a competitive apparel and footwear industry into a collaborative one, increasingly articulated around the ZDHC vision. Efforts to transition from using less to more sustainable chemical management practices have so far been foundational more than transformational.

Finding 7:   As compared to 2018, there is greater willingness today in the supply chain to invest time and money in better chemistry. The Gateway modules are used, well regarded and thought to be improving with continuing refinements. A new more demanding Leader Programme is rolling out for brands, manufacturers and now chemical suppliers. By design, these are to incentivise

better chemical management, procurement choices and market positioning along the supply chain, all informed by a reliable flow of facility and chemicals data. Signals are promising from this systems approach, but conclusive evidence of the business case for the Roadmap to Zero Programme remains to be secured.

Finding 8:   ZDHC's innovation agenda exceeds what the organisation has been able to address till now, creating a backlog of needs and opportunities. Grant supported pilots have yielded useful results in the form of industry guidelines and new production technologies, and they underline the benefits that can accrue in pre-competitive, multistakeholder processes. As such, they show a way for ZDHC to address the innovation gap. Meanwhile, ZDHC-led conversations to contextualise circularity in the chemical management domain are starting but, as yet, without a pathway toward the expected outcome of "industry uptake".

Finding 9:   ZDHC has made significant progress in increasing the level of transparency within the apparel supply chain. To date, however, accountability practices have not been sufficient to drive better chemistry. ZDHC is in a good position to promote consumer-facing transparency, but efforts in this area remain emergent.

Finding 10: Over the course of the grant, ZDHC has continued consolidating its organisational and governance structure, developed its body of policies, and somewhat built its operational capacity, including delivery of services to support users. Despite some notable improvements, Monitoring and Evaluation, and to some extent communications, remain a challenge for ZDHC.

Finding 11: Fundamentally, ZDHC is a convener. It has successfully increased its numbers of users, deepened and widened its geographical reach, enhanced convergence, and convinced chemical suppliers to get on board. The organisation has cast a wide net in its engagement with stakeholders, which has placed constraints on pace and level of ambition. The upcoming Leader Programmes are expected to counter this trend.

Finding 12: The grant has helped ZDHC in setting up the systems and processes necessary to increase and promote environmental sustainability by minimising the adverse impacts of toxic chemicals on the environment. Hurdles standing in the way of environmental sustainability are: tracking stakeholder compliance with standards, ensuring that compliant supply chain actors are rewarded by the market, and certifying suppliers in accordance with existing regulations.

Finding 13: ZDHC's financial growth has been steady since 2016. An increasingly pronounced revenue mix of brand memberships and service transaction fees make ZDHC more resilient than it was at the grant's outset. A COVID-19 racked economy notwithstanding, prospects for growth are strong with a shared vision, a fully assembled business model, an array of support services on the ready, and strategic and cost/efficiency conscious collaborations in development.

Finding 14: ZDHC is on the correct trajectory to contribute to wider system shifts. Its systems and processes are designed to scale, and it has begun expanding both into new regions and deeper into the supply chain. Increasing brand contributorship and engaging with other sectors are strategies yet to be actualised and promise to contribute significantly to ZDHC scaling up.

Appendix II.   List of Recommendations

Recommendation 1:   To reconcile the less restrictive "core support" designation of this grant with the use of a more restrictive, programme focused accountability framework, Laudes Foundation and ZDHC should review the original design document, the amended agreement of 18 March, 2020, and these MTR findings with a view to establishing a fresh amendment delineating the best possible focusing of grant resources for the remaining two years. As part of this, the parties should agree on a reporting framework that allows ZDHC to document: a) grant supported activities and results that are within the sphere of influence of the grant to produce, b) contributions made with grant resources toward the Priority Resource Areas in the ZDHC Strategic Growth plan.

Recommendation 2:   Laudes Foundation and ZDHC set the amendment discussion outlined in Recommendation 1 within the context of an exit strategy, wherein there is: clarity on intent to exit the partnership, a discussion of ZDHC's strategic need for grant funding, post 2022, to support its onward trajectory toward organisational and financial sustainability, and agreement on steps to be taken by Laudes Foundation and ZDHC over the coming two years to position the latter for a smooth transition.

Recommendation 3:   With an amended agreement in place, ZDHC review its grant management arrangements with a view to: a) enhancing manager level inclusion in decision-making; and b) scope for adaptive management practice in grant utilisation.

Recommendation 4:   It is critical that the Leader Programmes be fully rolled out and that this leads to industry actors making and upholding commitments to safer chemistry. Procurement practices in the supply chain should be monitored. Incentives should be considered to increase the likelihood that compliant actors are rewarded by the market. This will avoid ZDHC playing, or being perceived to play, to the lowest common denominator of interests pertaining to sustainability.

Recommendation 5:   A summit of accepted certifying bodies should be called by ZDHC to identify issues, opportunities and solutions related to assessing MRSL conformance. In preparation for such, ZDHC should gather issues from key stakeholders and build an agenda accordingly. The meeting should be led externally by a trusted, skilled, subject-knowledgeable facilitator. There should be a focus on issue resolution with appropriate documentation.

Recommendation 6:   Once the assembly of the ZDHC business model for sustainability is complete and fully operational, ZDHC should repeat the business case study in a bid to demonstrate the business case for industry stakeholders engaging in the ZDHC Programme to remove hazardous chemicals from the supply chain. This study should be done externally and adapted from the original investigation.

Recommendation 7:   Drawing on its pre-competitive, multistakeholder engagement experiences to date, ZDHC should position itself with a new innovation mechanism to expedite the chemical substitution process and facilitate the entry of new processes and guidelines that support chemical management best practices. Courses of action

suggested for ZDHC are consistent with the two studies noted above and can be summed up as follows:

- Triage the candidate list for the best combination of high impact and good prospect substitutions;

- Pose challenges – make calls for innovations and research;

- Convene multistakeholder working groups to review options; and

- Bring the most scalable options into the supply chain.

Recommendation 8:   Having now initiated a discussion among stakeholders with its circularity study, ZDHC assess: a) what activities and deliverables are required to operationalize the areas of work identified as points of convergence with the Roadmap to Zero programme, and b) which stakeholder organizations should be engaged in the effort and how in order to engender uptake of the roadmap by industry as per the relevant grant outcome. This exercise should be done with a reference to recommendation 1, so as to ensure that the work set out in this planning exercise is appropriately integrated within the amended agreement with Laudes Foundation.

Recommendation 9:   Efforts enabling greater transparency in the supply chain and with consumers should increase progressively as the grant progresses, as per the relevant anticipated outcome. ZDHC will need to refine its processes in this regard, steward its contributors in their journey towards transparency, and provide incentives to optimise uptake.

Recommendation 10:   ZDHC should continue its transition towards becoming a formally structured organisation, with more demarcation of roles and responsibilities among teams and clear identification of contact persons on different topics.

Recommendation 11:   The division of tasks between advisory groups and the ZDHC team should be reviewed for optimal performance. This may require that ZDHC produces the outputs itself, under the direction of the groups. It would be important to preserve the advisory group members' sense of ownership over outputs. For this more proactive stance, ZDHC would need to increase its chemistry competencies and bandwidth.

Recommendation 12:   ZDHC should review its communication strategy so as to clearly represent and socialise the organisation's overall vision to stakeholders, both internally and externally. This would clarify expectations and contribute to increased effectiveness and efficiency.

Recommendation 13:   ZDHC's M&E system needs refinement. In particular, data should be contextualised so that it shows progress in relation to global market parameters and/or to aspirational goals. Covid-19 fall out across the supply chain should be tracked and reported on with a view to learning about supply chain resilience. Improvements could take the form of a dashboard mechanism for high level KPI data as per the Strategic Growth plan, a data feed of ZDHC's global market presence, operational research studies related to the functioning of the Roadmap to Zero Programme (e.g. monitoring the impact of service pricing on industry users of the Gateway).

The methodology used to obtain and aggregate data used for claims around chemical management should be reviewed and clarified, so as to spur trust.

Recommendation 14: ZDHC should ensure that its driving force remains the brands, as they have the responsibility and the characteristics necessary to drive behavioural change across the supply chain. At the same time, in a dynamic systems change process such as this, the board and the Roadmap to Zero Programme should continually strive to have an adequate multistakeholder set up which allows for a pooling of expertise and shared ownership over the programme. Similarly, ZDHC should continually assess how NGOs and other professional bodies should best contribute to the programme through their expertise and of their capacity to encourage ambitious progress. The distribution of roles should be communicated to key stakeholders to ensure a shared understanding.

Recommendation 15: In order to reinforce ZDHC's status as a one-stop-shop and increase usability, it should find a way to certify only suppliers that meet existing regulations, e.g. regional and national standards.

Recommendation 16: Further convergence, geographic expansion, capacity development, and translation of important documents are warranted for ZDHC to increase the size of its ecosystem as well as its attraction to industry actors. The collaboration with the SAC, Textile Exchange and the AII could be leveraged for this purpose.

Recommendation 17: In order to increase ZDHC's scale, and thus effect system shifts, an augmentation of its number of contributors is warranted. ZDHC will need to assess any impetus to chart new programming directions that may come through this expansion, and ensure that any new venture brings net strategic value and builds on ZDHC's core competencies.

Appendix III.   Methodology

Overall Approach and Design

This mandate provides a formative assessment of programmatic, operational and contextual factors enabling/ inhibiting ZDHC to progress toward planned outcomes linked to the Laudes Foundation grant. The intent was two-fold: to tease out lessons learnt and recommendations in order to inform the initiative for the remaining grant duration, and to generate insight for Laudes Foundation on the strategic merit and pitfalls associated with large funding awards like this one directed toward helping recipients accelerate and scale their systems change initiatives.

This is a multi-faceted review. The MTR took into consideration the appropriateness of the grant design to ZDHC's institutional needs and challenges, the alignment of the grant with ZDHC's and Laudes Foundation's strategies, the current status and trajectory of activities supported under grant, monitoring and adaptive management practices, as well as communication for collective learning. The MTR assessed progress against the intermediate outcomes (listed above). Aspects of Sustainability and Scalability were assessed as well. To capture this range of information about the grant at its mid-point, the MTR followed a mixed methodological approach.

Universalia has designed the MTR to be consistent with the Laudes Foundation's newly minted ERS. This mandate among others in 2020 will serve to field test the ERS. **Appendix IV** sets out the Review Matrix. In it, the lines of inquiry mentioned above are organised under relevant criteria in the ERS.

Utilisation-Focused and Participatory Review

For this MTR, Universalia used a Utilisation-Focused approach.[23] This approach prioritises the usefulness of an evaluation or review to its intended users, which reflects the ToR's requirements to provide for learning, informed decision-making, and improved performance. This is an approach that Universalia has used numerous times which increases the relevance and utility of recommendations and their uptake.

Combined with a theory-based and learning-oriented framework, the MTR Team integrated the involvement of key stakeholders throughout the mandate. Their participation was designed as part of data collection, to discuss emerging findings, and to comment on deliverables. Contributions from ZDHC stakeholders have increased the quality of each MTR step, leading to relevant and useful recommendations.

With this in mind, the MTR Team understood the key stakeholders to be: relevant ZDHC staff (both those in management and those involved in activities supported under the core support grant) as well as governance members; key staff at Laudes Foundation involved with this initiative (notably Circular Fashion Programme and ONE staff); retailers and brands; value chain affiliates; associates; and other stakeholders (such as government organisations, NGOs, media and consultants).

Review Matrix

The MTR Team prepared a Review Matrix to structure and guide data collection and analysis for this assignment. It has been informed by a preliminary review of key grant documents, an orientation discussion with key ZDHC and Laudes Foundation staff, and by a briefing on the ERS. It is included in **Appendix IV**.

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[23] Patton, Michael Quinn (2008) *Utilization-Focused Evaluation*: 4th edition. Thousand Oaks, Ca: Sage Publications

The ERS sets out three dimensions of inquiry: Initiative Quality, Intermediate Outcomes, and Long-Term Value. Six groups of criteria are distributed across these dimensions. The table below shows those criteria assessed by the MTR Team as relevant to this mandate (i.e. 14 out 21 listed in the full collection of ERS criteria). Two additional dimensions are also featured in the ERS: an assessment of programme maturity and one of context difficulty. These dimensions, described more fully below under *Rating Method*, are in place to bound the review of the initiative with an understanding of internal (programme/organisational) and external (social, political, legal, etc.) conditions that will help the user interpret the findings of the review.

Table iii.1: Criteria to be Applied in Assessing Performance

INITIATIVE QUALITY	INTERMEDIATE OUTCOMES	LONG-TERM VALUE
A. Design & Implementation A1. Right design to address important needs, strengthen organisations & networks, & influence policies, legislation and industry narratives	**B. Precondition** B1. Changing the narrative: Influencing mental models, beliefs and assumptions in ways that support the desired change	**E. Impacts & Sustainability** E3. Environmentally sustainable business models & practices
		E4. Financial sustainability
A2. Alignment with CA&F's strategies & partners' strengths.	**C. Levers** C1. Transparency: Disclosure of data which enables constituents to hold decision makers to account	**F. Scalability** F1. Scale-up: Practical viability at larger scale
	C3. Innovation: The implementation of creative, imaginative ideas – including technologies – to solve industry challenges	
A3. Good implementation: Inclusive, enabling, empowering, capacity enhancing implementation approach.	C5. Business Models: Alternative business models promoting an inclusive and regenerative economy	
	D. Cross-Cutting Lenses	
A4. Proper monitoring and adaptive management to ensure sound decision making	D2. Organisational & network effectiveness: Organisations & networks with the right ability to produce relevant outcomes	
A5. Good communication to promote internal & external collective learning	D3. Convening & Collaboration in powerful and transformative ways towards meaningful industry change	

Source: Comea Relevant Evaluations and Real Evaluation (2019) *C&A Foundation's Evaluation Rubric & Rating System (ERS) for Evaluating Initiatives: A Guideline for Field Testing* (Revised Draft)

The Review Matrix organises the key questions from the ToR under these criteria, provides sub-questions for each along with a listing of intended results and baseline conditions (mostly) sourced from the grant design document. The Review Matrix also identifies indicators (signposts of change to guide the reviewer), data sources and methods of data collection. The Review Matrix will serve the team as a key reference in the design of data collection tools and in the overall pursuit of this mandate.

For this mandate, key questions are understood to be the following (see the full Review Matrix for details).

Table iii.2: Key Questions to Be Answered by the MTR

GROUPS OF CRITERIA	KEY QUESTIONS
A. Design & Implementation	**A1. Right Design** 1.1. Why was core support needed by ZDHC and has it been the right kind of support, in terms of – duration, scope, funding amount and flexibility? 1.2. How appropriate has the grant design been in contributing to the institutional strengthening of ZDHC and the performance of outcomes towards its objective of Accelerating and Scaling ZDHC Global Impact till date? **A2. Alignment** 1.3. How well was the grant aligned with the strategies of C&A Foundation (now Laudes Foundation) and ZDHC? **A3. Good Implementation** 1.4. Has the core funding been used for its initial intentions? 1.5. Were the activities implemented, till date, executed in an efficient manner? 1.6. How well have ZDHC's existing skills and experience enabled delivery of the outcomes (both for core support and implementation)? Have there been any gaps, and if so, why? 1.7. Has the initiative leveraged or amplified the effects of other grants/ initiatives? 1.8. What internal factors as well as challenges have influenced the implementation? And why? 1.9. What unintended results (positive or negative) has the grant produced till date and why? **A4. Proper Monitoring and Adaptive Management** 1.10. Has the grant tracked outputs and outcomes in a credible, systematic manner till date? **A5. Good Communication** 1.11. Has the grant employed good and appropriate communication to promote internal and external collective learning?
B. Precondition	**B1. Changing the Narrative** 2.1. Are the work activities covered under the grant showing potential to influence mental models and assumptions among brands, retailers, facilities, chemical suppliers, actors industry associations, (domestic) brands and retailers, manufacturers, chemical companies, regulatory bodies and ministries regarding harmful use of chemical inputs within the apparel and footwear industry?
C. Levers	**C2. Transparency** 3.1. What is the evidence of the initiative's having taken steps towards creating uptake of a consumer communication framework by the industry that contains chemical information aligned with ZDHC?
	C3. Innovation 3.2. What is the evidence of the initiative's effectiveness till date, and specifically, with respect to driving continuous improvement in the industry through piloting and scaling innovative chemical substitutions and alternative technologies? 3.3. To what extent is the grant on the appropriate trajectory to spur implementation of creative, imaginative ideas (innovations) to solve industry related challenges on chemical pollutants?

GROUPS OF CRITERIA	KEY QUESTIONS
	C5. Business Model
	3.4. What is the evidence of the initiative's effectiveness till date, and specifically, with respect to demonstrating the role of enabling chemistry through a business case study and documenting a circularity study for new business models?
	3.5. To what extent is the grant on the appropriate trajectory to make the case for alternative business models promoting an inclusive and regenerative economy?
D. Cross-Cutting Lenses	**D2. Organisational & Network Effectiveness**
	4.1. What have been the results of the core support till date? What difference has core funding made to ZDHC?
	4.2. What strategies or approaches adopted by the grant have the potential to produce medium-term and long-term impacts for institutional capacity building and subsequently achieving programmatic results?
	D3. Convening & Collaboration
	4.3. What is the evidence of the initiative's effectiveness till date, and specifically, with respect to deepening geographical reach and targeted stakeholder management for increasing uptake of chemical management solutions in target areas, ZDHC chemical management offerings available in additional languages?
	4.4. To what extent has the grant engaged with the 'most appropriate and relevant' stakeholders for achieving intended outcomes?
	4.5. How effective has the grant been in identifying and prioritising enablers to achieve results till date?
E. Impacts & Sustainability	**E3. Environmentally Sustainable**
	5.1. What has been the grant's potential in increasing and promoting environmentally sustainable business models and practices for industry stakeholders to reduce and/or eliminate their harmful chemical inputs?
	E4. Financially Sustainable
	5.2. What has been the grant's value in building long term capacities for ZDHC till date?
F. Scalability	**F1. Scale-Up**
	6.1. Is the grant on the correct trajectory to contribute towards wider system shifts and industry transformation in the use of harmful chemicals?
	6.2. Has the grant been able to assure viability both for long-term and for scale so far? What were the missed opportunities?
	6.3. What should the grant do to scale and sustain the drivers of change in the remaining phase?
G. Context	7.1. What factors external to the grant as well as risks have influenced the implementation? And why?

Methods

Overview

Data collection for the MTR was undertaken through a mixed-methods approach, reliant on the following methods:

- ▪ **Document, report and monitoring data review** of all existing documents and data held by ZDHC or Laudes Foundation deemed of relevance to the MTR;
- ▪ **Logframe review**, to assess the appropriateness of its indicators and suggest potential improvements;
- ▪ **Semi-structured interviews** with key informants. Due to the context of COVID-19 and associated travel restrictions, the MTR Team will conduct virtual interviews, as opposed to in-person ones. The different stakeholders interviewed are as follows:
  - 5 ZDHC staff
  - 3 Laudes Foundation staff
  - 6 retailer and brand staff
  - 6 value chain affiliates (manufacturers, chemical companies, and solution providers)
  - 7 associates
  - 11 other stakeholders (NGOs, industry associations, media, consultants, etc.)

A purposive sampling methodology was used, involving ZDHC, Laudes Foundation, and MTR Team members. Criteria used in selecting respondents include: a) good understanding of ZDHC (and of some workstreams and/or outcomes of the grant), b) diversity of perspectives, and c) engagement in the field of sustainable chemistry and/or with ZDHC over time. Based on these criteria, the ZDHC and Laudes Foundation teams have suggested a selection of stakeholders to be interviewed. The MTR Team has reviewed the selection and suggested some adjustments. Altogether, it is expected that 35 interviews will be conducted, some of which will include appropriate combinations of stakeholders (two people together). The list of key informants is presented in **Appendix V.**

Rating Method

In addition to answering the review questions presented in the Review Matrix (see **Appendix IV**), the MTR Team used Laudes Foundation's ERS to assess the overall performance so far of, and bring forward lessons from, the core support and implementation grant allocated to ZDHC.[24] For each of the selected criteria, the MTR provides a rating on a five-point scale, as laid out in **Figure iii.1**. The ERS field guide provides a tailored set of descriptors for each criterion.

The Initiative Quality dimension was assessed with one rating per criterion. The criteria related to Intermediate Outcomes and Long-Term Value display a transition from a pre- to a current state. The rating will reflect an assessment of the grant's progress from baseline conditions along an intended trajectory.

Figure iii.1: Point Rating System

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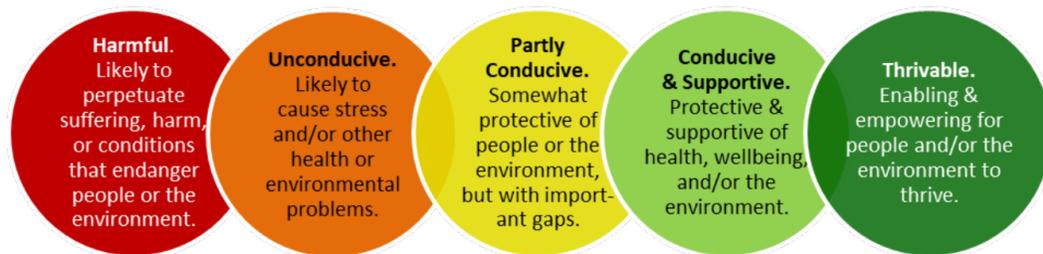
[24] Comea Relevant Evaluations and Real Evaluation (2019) *C&A Foundation's Evaluation Rubric & Rating System (ERS) for Evaluating Initiatives: A Guideline for Field Testing* (Revised Draft)

In addition to the five-point rating system, the ERS provides a rubric with which to delineate contextual factors and programme maturity factors. The former is addressed at the bottom of the Review Matrix and is set out in **Figure iii.2**.

Figure iii.2: Context Difficulty Minirubric
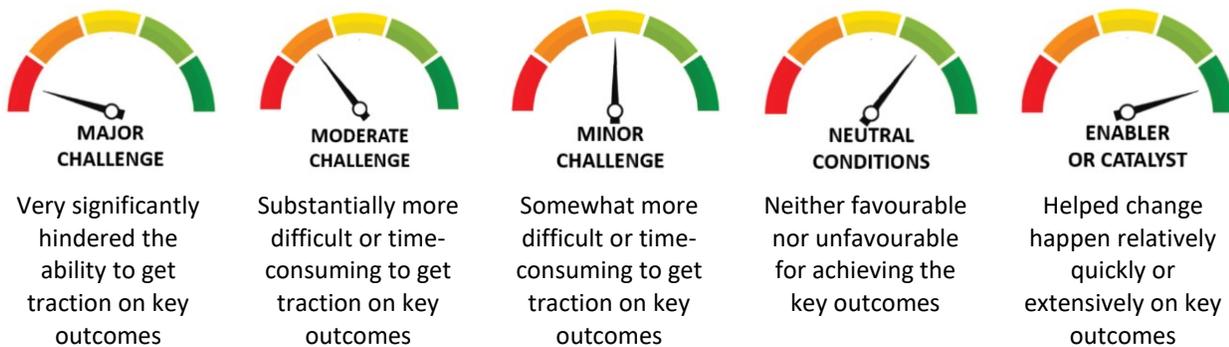
MAJOR CHALLENGE	MODERATE CHALLENGE	MINOR CHALLENGE	NEUTRAL CONDITIONS	ENABLER OR CATALYST
Very significantly hindered the ability to get traction on key outcomes	Substantially more difficult or time-consuming to get traction on key outcomes	Somewhat more difficult or time-consuming to get traction on key outcomes	Neither favourable nor unfavourable for achieving the key outcomes	Helped change happen relatively quickly or extensively on key outcomes

The MTR Team analysed institutional and organisational aspects that support ZDHC's capacity to deliver on its Roadmap to Zero Programme. There are sub-questions throughout the Review Matrix that explore these aspects. On the strength of this analysis, the team made an assessment of programme maturity using the minirubric in **Figure iii.3** below.

Figure iii.3: Programme Maturity Minirubric

NEWLY ESTABLISHED 1	DEVELOPING 2	CONSOLIDATING 3	FULLY MATURE 4
Recently started, still working to get its basic systems, processes, and personnel in place	Basics in place but still concentrating on making things work smoothly	Most things running smoothly and is refining its systems, processes, and performance	Up and running project, running smoothly, and working on continuous improvement

Data Analysis

The MTR Team conducted the following types of analysis in order to assess the data against the Review Matrix questions and the ERS rating system:

- **Theory-Based Analysis** – The MTR Team examined the extent of causality between grant activities and organisational development and programmatic outcomes, including an assessment of constraints and enabling factors. Lines of inquiry were pursued to understand the relationships between funded activities and grant outcomes, and the factors that have helped or hindered their progression to date. Across the four areas of grant support, the analysis teased out where activities show causal versus contribution links to outcomes. The Review Team looked for planned and unexpected outcomes that can be associated with the core grant.

- **Contribution Analysis** – Going further, the MTR Team teased out the significance of specific grant supported activities, in order to capture insights on the added value of the Laudes Foundation contribution to date, and to hone in on possible areas where refinements can be made in the use of the grant to leverage toward the outcomes desired.

- **Contextual and Stakeholder Analysis** – The organisational ecosystem within which ZDHC operates is complex with many independent, moving parts. A systems perspective of ZDHC's work will support a theory-based inquiry. On the basis of documents reviewed and with the support of the Independent External Expert Advisor (see below), the MTR Team designed a drawing of the ecosystem(s) where ZDHC evolves, and the array of actors with which it interacts. The Team examined stakeholder inclusion (and exclusion), shared intent and reciprocity, and identified ways that partnerships and collaborations might be made, reinforced or strengthened, as well as missed opportunities. The validated drawing helped the MTR Team pose questions and interpret responses about actual and preferred interactive effects stimulated by ZDHC with grant support. With use, the drawing was refined to serve as a useful input in describing findings, conclusions and recommendations.

- **Content Analysis** – Document and interview notes were analysed to identify common trends, themes, and patterns for each of the key units of analysis. Interpretive content analysis was used to flag diverging views and opposite trends. Emerging issues and trends constituted the raw material for crafting preliminary hypotheses and observations that will be subsequently refined to feed into the draft and final reports. A key output of the content analysis was the rubric analysis described above.

- **Institutional/ Organisational Analysis** – The Team looked at management activities pertinent to the implementation of the grant. It assessed the effects of the grant so far on ZDHC operations, finance, communications, IT, approach to M&E, and approach to risk. The Team assessed the effectiveness and efficiency of the ZDHC operating model to determine the extent to which it is 'fit-for-purpose' to assume the challenges associated with its growth and planning for the future. The Team also assessed the potential for scaling and contributing to wider systemic shifts and industry-related transformations as envisaged in its 5-year Strategic Growth plan.

- **Cost-Effectiveness Analysis** – The Review was anchored in a cost-effectiveness framework, aiming to assess whether and to what extent grant resources to support ZDHC have been used wisely and impactfully.

Overall, the analysis and synthesis will follow these steps:

- **Cross-referencing and Triangulation:** As data was gathered using different methods from different sources, validity was ensured though cross-referencing and triangulation, pursuing a convergence of multiple data sources.

- **Validation of Findings**: The MTR Team conducted a sense-making workshop with ZDHC and Laudes Foundation after conducting the synthesis and analysis of data, which served as an important touchpoint for the MTR Team. This ensured that the Review Team is on track with the analysis and that the Team had strong buy-in from ZDHC. Following preparation and submission of the Draft Report, ZDHC and Laudes Foundation also had the opportunity to provide written feedback to the MTR Team. This was captured in a response matrix and integrated into the Final Report. This whole process increased the accuracy, robustness, reliability, value, and user-orientation of findings, recommendations, and lessons learnt.

- **Quality Assurance:** Prior to submission of the Draft and Final Reports, the MTR Team also ensured that the deliverables had undergone rigorous internal quality control processes.

Independent External Expert Advisor

Of note, Joel Tickner, PhD, Executive Director of the Green Chemistry and Commerce Council (GC3) acted as an independent, external expert advisor to the team. In this capacity, he provided valued expertise in

the field of green chemistry, providing contextual analysis to the review on the matter of green chemistry and progress in its integration in the field of sustainable fashion. He situated ZDHC and other organisations (e.g. ChemFORWARD, etc.) within this evolving work, identifying contextual enabling and inhibiting factors to such progress. While providing expert consultative advice, Dr Tickner (GC3) remained fully independent throughout the mandate, with the following stipulations put in place:

- He did not form part of the core Review Team;
- He did not conduct interviews for this mandate, and did not have access to confidential interview data;
- He did not review confidential documents; and
- He did not have access to evaluative data.

As such, his expertise served to inform the Review without creating any actual or perceived conflict of interest, regarding his or GC3's existing or anticipated relationship with ZDHC, Laudes Foundation, or other bodies either commissioning, being subject to, or parties of this MTR.

Limitations

Three factors have constrained the team in addressing the MTR ToR. All are notable but none were significant enough to compromise MTR findings and the development of conclusions and recommendations.

- All interactions associated with the MTR were carried out remotely, eliminating the scope for "incidental" knowledge gathering that comes from observation and unstructured interaction.
- Many key informants had limited knowledge of the grant and its contribution.
- While significant as a grant, the amount of money involved represents a modest proportion of the total operating budget of ZDHC; this made it challenging to show the grant's contribution to the ZDHC outcomes assigned to it.

Appendix IV. Review Matrix

Below is the MTR matrix for this mandate, based on a reading of the ToR and of grant documents as well as discussions held during the inception phase. It includes key questions and sub-questions as well as a list of indicators, data sources, and data collection methods. All key questions from the ToR are copied here, and some were broken into a combination of key and sub-questions. Certain sub-questions were added, to allow for a more explicit breakdown of questioning lines. The intended results were mostly drawn from the grant's logframe or proposal document. The Team organised the questions in concert with Laudes Foundation's ERS. The rubric addresses three dimensions: Initiative Quality, Intermediate Outcomes, and Long-Term Value. In order to allow for an assessment using the rubric, the Review Team integrated intended results and baseline (for Intermediate Outcomes only) in the matrix below on the basis of the contents of the grant's log frame and narrative in the grant proposal. This matrix guided the MTR; findings answer the questions below, as presented in the column "Findings".

Table iv.1   **MTR Matrix**

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
A. DESIGN AND IMPLEMENTATION	**A1. Right Design**	1.1. Why was core support needed by ZDHC and has it been the right kind of support, in terms of – duration, scope, funding amount and flexibility?	1.1.1. How were the organisational needs and challenges of ZDHC assessed?	• Four scaling mechanisms identified in ZDHC's Strategic Growth plan: a) Demonstrate the enabling role of chemistry, b) Strengthen organisational capacity, c) Deepen geographical reach and implementation support, and d) Drive continuous improvement are holding at the mid- point of the project cycle (Proposal, pp.15,16)		Presence of data and judgement on the needs assessment process	Documents ZDHC and Laudes Foundation staff	Finding 1
			1.1.2. How well was the grant (its modality, structure and targeting of support) aligned to the organisational needs and challenges of ZDHC?			Presence of data and judgement to support grant design Perceptions of the grant's continuing rationale	Documents ZDHC and Laudes Foundation staff	Finding 1
			1.1.3. On what grounds was the grant justified? Has that justification held over time?					Finding 1
		1.2. How appropriate has the grant design been in contributing to the	1.2.1. What aspects of the Laudes Foundation grant stand out for the leveraging that has been achieved, so far?			Perceptions of the appropriateness of the choice of	Documents ZDHC staff Retailers	Finding 1

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		institutional strengthening of ZDHC and the performance of outcomes towards its objective of Accelerating and Scaling ZDHC Global Impact till date?	1.2.2. Are there any aspects of the grant that have yet to show improvements to the extent envisaged?			activities and the level of resourcing in pursuit of grant outcomes	Value chain affiliates Associates	Finding 1
	A2. Alignment	1.3. How well was the grant aligned with the strategies of C&A Foundation (now Laudes Foundation) and ZDHC?	1.3.1. In what ways did the grant align with C&A Foundation's vision and mission, as well as the with the strategy of the then Circular Fashion programme?	• (Continued) consistency		Consistency of the grant with statutory documents	Documents	Finding 2
			1.3.2. Does the grant align with Laudes Foundation's vision, mission and model of philanthropy?					Finding 2
			1.3.3. In what ways does the grant reinforce ZDHC's vision and mission?					Finding 2
	A3. Good Implementation	1.4. Has the core funding been used for its initial intentions?	1.4.1. Has this changed and if yes, why?	• Adaptive management		Variance in spending from original plan	Documents ZDHC	Finding 3
			1.4.2. How has the COVID-19 crisis impacted ZDHC and specifically, grant outcomes?			List of COVID-19 related changes to: ZDHC operations, stakeholder relationships, climate for this kind of systems change work	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 3
		1.5. Were the activities implemented,	1.5.1. Are the targets realistic given the scale of operations?				Documents	Finding 3

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		till date, executed in an efficient manner?	1.5.2. What trade-offs and adjustments, if any, have been made by the grant in order to drive efficiency so far?	• Realistic assessment of what can be achieved given the availability of time and resources		Comparison of actual to planned efficiency measures Evidence of cost savings	ZDHC Staff Laudes Foundation Staff	Finding 3
			1.5.3. Is the relationship between the grant costs and outcomes reasonable based on relevant benchmarks known to ZDHC and/or Laudes Foundation?	• Sensitivity to efficiency standards and practices		Comparison of cost/ outcome benchmark data (to the extent that relevant comparators exist)		Finding 3
			1.5.4. What efficiency seeking policies, tools and strategies have been used? What have produced the greatest dividends, to date?					Finding 3
		1.6. How well have ZDHC's existing skills and experience enabled delivery of the outcomes (both for core support and implementation)? Have there been any gaps, and if so, why?	1.6.1. What skills profile was indicated in the grant design? To what extent has this profile been matched in ZDHC's staffing decisions?	• Additional staff brought on with relevant expertise and experience to expand new content areas and support convergence (Proposal, p.17)		Before/ after comparison of ZDHC skills profile and staffing numbers	Documents ZDHC Staff Retailers Value chain affiliates	Finding 3
			1.6.2. Do any effectiveness shortcomings observed in the MTR pertain to continuing skills gaps? Suggestions?			Perceptions of continuing skills gaps as a contributor to performance issues	Associates	Finding 3

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		1.7. Has the initiative leveraged or amplified the effects of other grants/ initiatives?	1.7.1. To what extent has the grant enabled ZDHC to raise the profile/ extend the potency of work already being implemented under its strategic plan?	• Value chain provided with a chemical management framework that: drives chemical companies to produce safer formulations and develop innovations; actively facilitates the process of substituting safer formulations; and supports the global value chain in implementation of the ZDHC chemical management framework (Proposal, p.30)		Documenting examples of where the presence of the grant has enabled: new work, enhanced relationships, new investment, increased influence	Documents ZDHC staff Retailers Value chain affiliates Associates	Finding 3
		1.8. What internal factors as well as challenges have influenced the implementation? And why?	1.8.1. Within and across the four strategic areas of intervention, what have proven to be the most significant enablers on progress, so far? How has ZDHC addressed these?	n/a		Perceptions of constraining and enabling effects affecting activities and results within each strategic area under the grant	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 3
			1.8.2. Within and across the four strategic areas of intervention, what have proven to be the most significant constraints on progress, so far? How has ZDHC addressed these?					Finding 3
		1.9. What unintended results (positive or negative) has the grant produced till date and why?	1.9.1. Across the four strategic areas of intervention, has the project produced unintended results? What are the most noteworthy and why?	n/a				Finding 3

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
	A4. Proper Monitoring and Adaptive Management	1.10. Has the grant tracked outputs and outcomes in a credible, systematic manner till date?	1.10.1. What mechanisms (formal or informal) have been put into practice to capture results, experiences and lessons to inform the institutional strengthening approach and to achieve intended outcomes till date?	• ZDHC Management Team monitoring within own work area, supported by staff under the Impact and Strategy Reporting Manager		Coherence of results-based planning management arrangements	Documents ZDHC Staff Laudes Foundation Staff	Finding 4
			1.10.2. To what extent have grant outcomes and their indicators been linked to data collection instruments and data collection routines?	• Key reference is the log frame				Finding 4
			1.10.3. Are the indicators in the logframe congruous to the grant? Do any need to be adapted?	• Third party data collection for the Leader Programme				Finding 4
			1.10.4. In pursuit of outcomes, are precursor outputs identified within each outcome stream and assigned to Teams/ individuals?	• Own tracking system for the Gateway chemical and wastewater modules; and each Priority Resource Area (PRA) in Strategic Plan (Proposal, pp. 32-33)				Finding 4
			1.10.5. By what process does ZDHC assess and manage risk?			Comparison of ZDHC arrangements to "effective practices"	Documents ZDHC Staff Laudes Foundation Staff	Finding 4
			1.10.6. To what extent does the flow of data: a) guide management, b) inform donor reporting and communications, c) enrich Team learning at ZDHC?					Finding 4
			1.10.7. Has the grant met the requirements (reports, products, milestones, impacts) on time and as set out in the Implementation Monitoring & Evaluation and Disbursement Schedule?	• On time as per schedule (Proposal, pp. 3-6, Amended March 18th, 2020)		Consistency of actual delivery with contract expectations	Documents ZDHC Staff	Finding 4

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
			1.10.8. Where targets have been missed till date, to what extent are the reasons related to: a) the appropriateness of the targets themselves, b) contextual factors that unexpectedly hindered progress (including but not restricted to COVID-19)?	n/a		Analysis of variance – patterns of response across Team members	Documents ZDHC Staff	Finding 4
	A5. Good Communication	1.11. Has the grant employed good and appropriate communication to promote internal and external collective learning?	1.11.1. To what extent are stakeholder groups (internal and external) made aware of the progress made by ZDHC under the grant?	• Stakeholders are satisfied that they are sufficiently apprised of progress being made by ZDHC across the four-scaling mechanism		Stakeholder perceptions of: a) the quality of information received about ZDHC activities and results, b) the opportunities to engage in learning and exchange	ZDHC Staff Retailers Value chain affiliates Associates	Finding 5
B. PRECONDITION	**B1. Changing the Narrative**	2.1. Are the work activities covered under the grant showing potential to influence mental models and assumptions among brands, retailers, facilities, chemical suppliers, actors industry associations, (domestic) brands and retailers, manufacturers, chemical companies, regulatory bodies and ministries regarding harmful use of chemical inputs within the apparel and footwear industry?	2.1.1. What are the most likely drivers of change away from the harmful use of chemical inputs for each of the identified actors in ZDHC's systems change ecosystem?	• C-suite industry executives and influencers engage on the strength of the business case and its value propositions (adapted from Proposal, pp. 16-17)	While there is a lead group of adopters, the textile, apparel, footwear and leather industry as a whole remains to be convinced of the "enabling role of chemistry" as demonstrated through ZDHC standards, guidance and tools. (adapted from proposal, pp. 16-17)	Perceptions actor informants on the drivers most likely to shift organisational behaviour	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 11
			2.1.2. To what extent has the grant positioned ZDHC to influence those actors accordingly?			Perceptions of actor informants on the targeting of ZDHC's activities to exert influence on organisational behaviour		Finding 11
			2.1.3. What progress has been made/ insights gained harnessing the power of brands to be a force for the introduction of green chemistry into the fashion and footwear industry?					Finding 11

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
C. LEVERS	C1. Transparency	3.1. What is the evidence of the initiative's having taken steps towards creating uptake of a consumer communication framework by the industry that contains chemical information aligned with ZDHC?	3.1.1. What progress has ZDHC been made in this regard?	**Outcome 6** Uptake of a consumer communication framework by the industry that contains chemicals information aligned with ZDHC Year 1: 5% Year 2: 15% Year 3: 30% Year 4: 50% (project log frame)	**Outcome 6 Indicator** % and type of brands and retailers above €1 billion in annual revenue that use consumer facing information on chemicals in products 0% (project log frame)	Comparison of planned to actual outcomes Validation through interviews Examples of progress or lack thereof	Documents ZDHC Staff Retailers	Finding 9
	C3. Innovation	3.2. What is the evidence of the initiative's effectiveness till date, and specifically, with respect to driving continuous improvement in the industry through piloting and scaling innovative chemical substitutions and alternative technologies?	3.2.1. What progress has ZDHC made in designing and launching pilots that bring safer solutions to scale? How is the quality of pilots measured?	**Outcome 3** Increase in the number and type of innovation pilots and respective showcases Year 1: 2 Year 2: 3 Year 3: 3 Year 4: 1 (project log frame)	**Outcome 3 Indicator** – Number and type of innovation pilots launched and respective showcases available 1 (project log frame)	Comparison of planned to actual outcomes Validation through interviews Examples of progress or lack thereof	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 8

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		3.3. To what extent is the grant on the appropriate trajectory to spur implementation of creative, imaginative ideas (innovations) to solve industry related challenges on chemical pollutants?	3.3.1. What progress has been made towards achieving industry uptake of practical circulatory roadmap detailing: chemicals research needs, innovative chemistry solutions, and applicability of new business models?	**Outcome 2** Uptake of practical circulatory roadmap on chemicals research need, innovative chemicals solutions, and applicability of new business models 100% (project log frame)	Outcome 2 indicator Circulatory roadmap on chemicals publicly available to the industry as a reference document, including ZDHC's role for circularity (posted on social media) 0% (project log frame)	Comparison of planned to actual outcomes Validation through interviews Examples of progress or lack thereof	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 8
	C5. Business Model	3.4. What is the evidence of the initiative's effectiveness till date, and specifically, with respect to demonstrating the role of enabling chemistry through a business case study and documenting a circularity study for new business models?	3.4.1. What support/ cautions were evident in the findings of the 2018 survey for the business case study? How have these findings guided ZDHC to date?	Business Case study references to Outcome 1 (see 4.3, below) Circularity Study references to Outcome 2 (see 3.2, above)	n/	Comparison of actual to planned progress with two studies Validation by stakeholders through interviews	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 7
			3.4.2. At what stage of development is the Circularity Study? What information is in place? What is required before launch?					Finding 7
		3.5. To what extent is the grant on the appropriate trajectory to make the case for alternative business models promoting an inclusive and regenerative economy?	3.5.1. Are additional study/ research components needed beyond the case study and circularity study to demonstrate the enabling role of chemistry in the textile, apparel and footwear industry?			Perceptions regarding knowledge gaps as yet unaddressed	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 7

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
D. CROSS-CUTTING LENSES	D2. Organisational & Network Effectiveness	4.1. What have been the results of the core support till date? What difference has core funding made to ZDHC?	4.1.1. What progress is evident regarding: "Capacity to develop guidelines and standards; and to provide trainings through the ZDHC academy"?	• Business Case Study • Sustainable Chemical Management Framework • Circularity study	n/a	Comparison of planned to actual outputs Validation through interviews Examples of progress or lack thereof	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 10
			4.1.2. What progress is evident regarding: "Communication and IT capacities"?	• Communications programme & marketing materials (multiple languages)				Finding 10
			4.1.3. What progress is evident regarding: "Operational and financial capacities"?	• Formal collaboration with key stakeholders				Finding 10
			4.1.4. What progress is evident regarding: "Relationships with actors such as brands, retailers"?	• Academy • Knowledge based platform				Finding 11
			4.1.5. What are the most significant signs that ZDHC is progressing towards organisational sustainability?	• Region specific content for trainings • Consumer communication framework (project log frame – outputs) *no general operational and financial capacity results mentioned in proposal*				Finding 10

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		4.2. What strategies or approaches adopted by the grant have the potential to produce medium-term and long-term impacts for institutional capacity building and subsequently achieving programmatic results?	4.2.1. What have been the merits and drawbacks of ZDHC expansion into new content areas such as man-made cellulosic fibres?	• Increased capacity to include the content area into its programme and develop related standards and guidelines; and be able over time to add additional synthetic fibres (Proposal, p.20)	n/a	Comparison of planned to actual results (as per proposal)	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 8
			4.2.2. What dividends are evident from grant spending on the marketing of ZDHC tools?	• Increased uptake of ZDHC Gateway modules and related services by industry (30%/yr in users) (Proposal, p.20)				Finding 7
			4.2.3. In the drive to converge industry around a single chemical management framework, what strategies/ approaches have been more/ less productive to date?	• A single chemical management platform that is harmonised and converged and acting as a clearing house for chemical assessments (Proposal, p.21)				Finding 11
	D3. Convening & Collaboration	4.3. What is the evidence of the initiative's effectiveness till date, and specifically, with respect to deepening geographical reach and targeted stakeholder management for increasing uptake of chemical management	4.3.1. How has ZDHC engaged with, and understood the drivers of engagement of, contributors?	Outcome 1 Reduction and removal (phase out) of hazardous chemicals use and uptake of safer and innovative alternatives by companies in the industry supply chains *a. 100% using/ endorsing MRSL*	Outcome 1 indicator a. % and type of strategic priority companies using and endorsing and using the ZDHC MRSL across their supply chains and networks - 40%	Comparison of planned to actual outcomes Validation through interviews Examples of progress or lack thereof	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 11
			4.3.2. What reasons are being given by contributors for endorsing (or not) the ZDHC MRSL?					Finding 11
			4.3.3. How binding are the agreements that contributors commit to?					Findings 11, 12

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		solutions in target areas, ZDHC chemical management offerings available in additional languages?	4.3.4. What are the growth trends in the sign up of retailers and brands into the Leader Programme (size, type)?	*b. 70% increase in progress ratio under Leader Programme* *c. 8,000 facility users* *Year 1: 2,500* *Year 2: 4,000* *Year 3: 6,000* *Year 4: 8,000*	b. % and type of brands and retailers above €1 billion in annual revenue that show an increase in progress ratio under the Leader Programme *- 0%*			Finding 7
			4.3.5. What are the growth trends in the number and type of users of ZDHC tools, Academy (training and resources), implementation HUB projects? How are these trends playing across language groups?					Finding 7
				Outcome 4 Increase in the convergence of chemical management frameworks and harmonised implementation by brands *50% reduction in use of non ZDHC approaches* Outcome 5	c. Number and type of facilities using ZDHC tools, Academy offerings, and implementation Hub projects *- 500* Outcome 4 indicator % reduction in use of non-ZDHC approaches to			Finding 10
			4.3.6. To what extent has ZDHC been able to field appropriately skilled individuals (consultants and staff) or enter into partnerships with other organisations to engage stakeholders (e.g. industry associations, brands/ retailers, chemical companies, regulatory bodies and ministries)?					

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
			4.3.7. What steps has ZDHC taken towards systematising a knowledge platform around implementation barriers/ issues and potential solutions?	ZDHC serves as the Industry's central platform for improved decision-making and performance throughout the chemical management process *100% collaboration with identified strategically relevant organisations* (project log frame)	sustainable chemical management among brands & retailers above €1 billion in annual revenue - *0%* Outcome 5 indicator Formal collaboration with % and type of strategic priority organisations for multiplication of ZDHC activities primarily based on recognition and use of the ZDHC Programme - 30% (project log frame)			Finding 10
		4.4. To what extent has the grant engaged with the 'most appropriate and relevant' stakeholders for achieving intended outcomes?	4.4.1. What can be learned about how ZDHC has: a) assessed its actor/ stakeholder landscape? b) kept its assessment current? c) set the parameters and tone for the engagement? d) addressed the relationship issues that have arisen?	n/a	n/a	Actor/ stakeholder perceptions of the quality of engagement ZDHC has with them	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 11
		4.5. How effective has the grant been in identifying and prioritising enablers to achieve results till date?	4.5.1. What could be done under the grant to sharpen ZDHC's ability to influence identified actors in the second half of the grant cycle?	n/a	n/a	Perceptions of scope to adjust activities based on knowledge of enablers/ options	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 11

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
E. IMPACTS & SUSTAINABILITY	E3. Environmentally Sustainable	5.1. What has been the grant's potential in increasing and promoting environmentally sustainable business models and practices for industry stakeholders to reduce and/or eliminate their harmful chemical inputs?	5.1.1. What sustainability scenarios need to be reached for ZDHC and partners to say that scaling the work of removing harmful chemicals from the supply chain has been successful?	n/a		Level of agreement on thresholds and required actions	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 12
			5.1.2. What priority actions are required under the grant in the second part of the funding cycle to maximise the ZDHC's potential to meet agreed sustainability thresholds?			Before-after comparisons across organisational/ financial metrics Workplace perceptions	Documents ZDHC Staff	Finding 12
	E4. Financially Sustainable	5.2. What has been the grant's value in building long term capacities for ZDHC till date?	5.2.1. To what extent has the grant enabled ZDHC to attract resources to undertake additional work under its strategic plan?	n/a		Before-after comparisons across organisational/ financial metrics	Documents ZDHC Staff Documents ZDHC Staff	Finding 13
			5.2.2. What changes are evident in: a) ZDHC's organisational structure, b) human capacities, c) massing, and quality, of relationships?			Workplace perceptions Perceptions of the systems change potency of grant contributions to ZDHC	Retailers Value chain affiliates Associates	Finding 10, 11
			5.2.3. What are the main factors that have promoted and/or reduced the grant sustainability and results till date?					Finding 12, 14
F. SCALABILITY	F1. Scale-Up	6.1. Is the grant on the correct trajectory to contribute towards wider system shifts and industry transformation in the use of harmful chemicals?	6.1.1. How important have the strategic areas identified in the grant design been to the value chain transformations sought by ZDHC?			Perceptions of the systems change potency of grant contributions to ZDHC	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 14
			6.1.2. Which of these strategies and processes, if not all as a whole, can be replicated?			Listing/ranking of determinants of		Finding 14

GROUPS OF CRITERIA	CRITERIA	KEY QUESTIONS	SUB-QUESTIONS	INTENDED RESULTS	BASELINE	INDICATORS	DATA SOURCES	FINDINGS
		6.2. Has the grant been able to assure viability both for long-term and for scale so far? What were the missed opportunities?	6.2.1. What are the most prominent determinants of a successful systems intervention? Where are the traps?			successful systems interventions		Finding 14
		6.3. What should the grant do to scale and sustain the drivers of change in the remaining phase?	6.3.1. What components of the ZDHC grant are scalable?			Availability of options to point toward scalability/ options	Documents ZDHC Staff Retailers Value chain affiliates Associates	Finding 14
G. CONTEXT		7.1. What factors external to the grant as well as risks have influenced the implementation? And why?	7.1.1. Considerations include factors related to: • geography and climate • natural disasters and other emergencies • cultural norms • political environment/unrest • legal environment • grantee strengths and resources	n/a	n/a	Perceptions of constraining and enabling effects affecting activities and results within each strategic area under the grant	Documents ZDHC Staff Retailers Value chain affiliates Associates	Section 3.1 – Context

Appendix V.   Stakeholders Consulted

Table v.1: List of Stakeholders Consulted

LAST NAME	FIRST NAME	POSITION	ORGANISATION
Agrawal	Mukul	Chief Sustainability Officer	Birla Cellulose
Almeida	Fabio	Organisational Network Effectiveness Manager	Laudes Foundation
Bansal	Abhishek	Head of Sustainability	Arvind Limited
Bayer	Andreas	Textiles, Leather Auxiliaries and Colourants	TEGEWA
Brennan	Adam	Unit Leader Environmental and Chemical Sustainability, Europe/Global	C&A
Cattermole	Amanda	Founder and Consultant	Amanda Cattermole Consulting
Chan	Carmen	Senior Sustainability and Fabric Manager	Tesco (F&F)
Chen	Andy	Director, MRSL Chemistry	NIKE
Chen	Wei Wang	President	Everlight Chemicals
Davidson	Jane	Founder and Principal Consultant	Real Evaluation
Dickinson	Charles	Director, MRSL Chemistry	Primark
Echols	Scott	Senior Roadmap to Zero Director	ZDHC
Fois	Pierfrancesco	Executive Director	ETAD
Francis	Annie	Senior operations director	ZDHC
Frazier	John	Senior Technical Director	Hohenstein / OEKO-TEX
Glass	Stacy	Executive Director	ChemForward
Gregory	Peter	Freelance Consultant	Vert Tex
Herfeldt	Michelle	Junior Sustainability Manager (Monitor)	Tchibo
Lemke	Rahel	Project manager, Environment Management	German Partnership for Sustainable Textiles hosted by GIZ
Ligthart	Jerker	Senior Chemicals Advisor	ChemSec
Michel	Frank	Executive Director	ZDHC
Mowbray	John	Founder and Director	Ecotextile News
Mull	Savi	Senior Evaluation Manager	Laudes Foundation

LAST NAME	FIRST NAME	POSITION	ORGANISATION
Nuttbohm	Klaas	Implementation Director	ZDHC
Olah	Andrew	Founder	Transformers Foundation
Papadopoulou	Georgia	Impact and Strategy Reporting Manager	ZDHC
Pariti	Siva	Senior Technical Marketing Officer, BluWin	Sustainable Textile Solutions
Patterson	Phil	Managing Director	Colour Connections Textile Consultancy
Razvi	Amina	Executive Director	Sustainable Apparel Coalition
Sanchez	Miguel	Technology Expert and President of Gavilanad	Transformers Foundation
Schäfer	Thomas	Head of BLUESIGN Academy	BLUESIGN
Schaffer	James	Managing Partner	Schaffer and Combs
Sinnemaki	Veera	Global Sustainability Program Manager	H&M
Sponsler	Nathaniel	Director	AFIRM Group
Storrie	Graham	Director	Texology
Ursem	Thomas	Senior Manager, Sustainability Services	KPMG
Ursu	Silvia	Programme Manager	Laudes Foundation
Vazirani	Rakesh	Head of Sustainability Services	TUV Rheinland
Vuddamalay	Ilan	Senior Programme Manager	Laudes Foundation
Watt	Anna	Programme Officer	Laudes Foundation
Wilde	Ben	Director, Europe	ADEC Innovations

Appendix VI. Documents Consulted

Contracts

- Laudes Foundation (2020) Grant Agreement with ZDHC Foundation – Modified
- Laudes Foundation (2018) Grant Agreement with ZDHC Foundation
- ZDHC Foundation (2018) Grant Agreement with ZDHC Foundation (including Detailed Budget, Key Performance Indicators, and Proposal)

Feedback

- Ursu, S (2020) Comments and Questions on Monitoring Report
- Ursu, S (2020) Notes from Call with Amanda Cattermole
- Ursu, S (2019) Notes from Call with Frank Michel

Monitoring Reports

- ZDHC Foundation (2020) End of Year 2019 Monitoring Report to Laudes Foundation – updated 25-03-2020
- ZDHC Foundation (2019) End of Year 2019 Monitoring Report to Laudes Foundation
  - ZDHC Foundation (2019) *The business case for removing hazardous chemicals with ZDHC – Survey results*
- ZDHC Foundation (2020) End of Year 2020 Monitoring Report to Laudes Foundation (September)
  - ZDHC Foundation (2020) *Media Report September 2020*
  - ZDHC Foundation (2020) *study on Blockchain based solutions*
  - Sustainable Apparel Coalition and ZDHC Foundation (2020) *Proof of Trust in Fashion Report*
- Wastewater monitoring reports
  - ZDHC Foundation (2020) *Wastewater End of project self-evaluation 03/2020*
  - ZDHC Foundation (2019) *Wastewater monitoring report 12/2019*
  - ZDHC Foundation (2019) *Wastewater annual monitoring report (2018) and progress report (01/2019)*
  - ZDHC Foundation (2018) *Wastewater interim report 07/2018*
  - ZDHC Foundation (2018) *Wastewater monitoring report 01/2018*
  - ZDHC Foundation (2018) *Wastewater annual monitoring report 01/2018*
  - ZDHC Foundation (2017) *Wastewater interim report 07/2017*
  - ZDHC Foundation (2017) *Wastewater interim report updated 03/2017*

Financial Statements

- ZDHC (2017) Financial Statement 2017

- ZDHC (2018) Financial Statement 2018

- ZDHC (2019) Financial Statement 2019

Other Documents

- Amfori (2020) *amfori and ZDHC: Leading the way in sustainable chemical management.* Available at: https://www.amfori.org/news/amfori-and-zdhc-leading-way-sustainable-chemical-management

- Amplifier (s.d.) *Program grants vs. Operating Support (including 8 Tips for Being a Good Donor).* Available at: https://www.amplifiergiving.org/media/resources/Program_Grants_vs._General_Operating_Support__including_8_Tips_for_Being_a_Good_Donor.pdf

- Center for Effective Philanthropy (2019) *Greater Good – Lessons from Those Who have Started Major Grantmaking Organizations.* Available at: https://cep.org/portfolio/greater-good-lessons-from-those-who-have-started-major-grantmaking-organizations/

- Chemical Watch (2017) *ZDHC Recognizes ECO PASSPORT by OEKO-TEX as an Indicator of MRSL Conformance.* Available at: https://chemicalwatch.com/60342/zdhc-recognizes-eco-passport-by-oeko-tex-as-indicator-of-mrsl-conformance

- ChemSec (2020) *ChemSec and ZDHC collaborate in a joint request for safer alternatives*. Available at: https://chemsec.org/press-release-chemsec-and-zdhc-collaborate-in-a-joint-request-for-safer-alternatives/

- Colour Connections (2020) *Chemical Circularity in Fashion*. Available at: https://www.laudesfoundation.org/en/resources/2020/05/chemical-circularity-digital.pdf

- Comea Relevant Evaluations and Real Evaluation (2019) *C&A Foundation's Evaluation Rubric & Rating System (ERS) for Evaluating Initiatives: A Guideline for Field Testing (Revised Draft)*

- Ellen MacArthur Foundation (2017) *A new textiles economy: Redesigning fashion's future.* Available at: https://www.ellenmacarthurfoundation.org/publications

- Ford Foundation (2020) *Grantmaking Glossary*. Available at: https://www.fordfoundation.org/campaigns/grantmaking-glossary/

- GrantCraft (2018) *The Effective Exit – Managing the End of a Funding Relationship*. Available at: https://grantcraft.org/wp-content/uploads/sites/2/2018/12/guide_exit.pdf

- Grantmakers for Effective Organizations (GEO) (2014) *What is General Operating Support and Why is it Important.* Available at: https://www.geofunders.org/resources/what-is-general-operating-support-and-why-is-it-important-678

- Greenpeace (2020) *Implementing Extended Producer Responsibility for Global Supply Chain Chemical Management - The Detox and Textiles Case Study*

- Greenpeace (2018) *Destination Zero- Seven years of Detoxing the Clothing Industry.* Available at: https://www.greenpeace.org/international/publication/17612/destination-zero/

- Institute for Voluntary Action Research (s.d) *Core Funding.* Available at: https://www.ivar.org.uk/our-research/core-funding/

- Lollo, N., & O'Rourke, D. (2020). *Measurement without Clear Incentives to Improve: The Impacts of the Higg Facility Environmental Module (FEM) on Apparel Factory Practices and Performance*. Available at: https://doi.org/10.31235/osf.io/g67d8

- Michel, F. & Kaelble, S (2020) *Detoxing the Fashion Industry*. Available at: https://www.detox-fashion.club/

- Patton, Michael Quinn (2008) *Utilization-Focused Evaluation*: 4th edition. Thousand Oaks, Ca: Sage Publications

- Rudolf Group (2019) *ZDHC Foundation is Welcoming a Group of the World's Leading Chemical Suppliers (*GCIRT).* Available at: https://www.rudolf.de/en/support/newsroom/details/zdhc-foundation-is-welcoming-a-group-of-the-worlds-leading-chemical-suppliers-gcirt/

- Seigel, S. (2014) Building Capacity by Transforming Grantor/Grantee Relationships. Grantcraft. Available at: https://grantcraft.org/content/blog/building-capacity-by-transforming-grantor-grantee-relationships/

- Sustainable Fashion Academy (2020) *Big Closets Small Planet with Michael Schragger*. Available at: https://www.sustainablefashionacademy.org/podcasts/big-closets-small-planet/make-your-case-phil-patterson-circular-chemical-management

- Tactical Philanthropy (2019) *Introducing the Intrinsic Investing Blog.* Available at: https://www.tacticalphilanthropy.com/

- UNICEF (2011) *Funding Modalities – Quick Reference.* Available at: https://www.unicef.org/Funding_Modalities_Sept_2011.pdf

- UNIDO (2020) UNIDO and the ZDHC Foundation use webinars to support the resilience of SMEs in Moroccan and Tunisian textile and garment industry. Available at: https://www.unido.org/news/unido-and-zdhc-foundation-use-webinars-support-resilience-smes-moroccan-and-tunisian-textile-and-garment-industry

- United States Environmental Protection Agency (2020) *Green Chemistry*. Available at: https://www.epa.gov/greenchemistry

- Villena, V,H & Gioia, D. A (2020) *A More Sustainable Supply Chain.* Harvard Business Review. Available at: https://hbr.org/2020/03/a-more-sustainable-supply-chain

- Weingart Foundation (2012) *Unrestricted Core Support: Strengthening the Capacity of our Non-profit Sector.* Available at: https://www.weingartfnd.org/files/core-support-report.pdf

- ZDHC Foundation (2019) *ZDHC and bluesign collaboration*. Available at: https://www.roadmaptozero.com/post/zdhc-and-bluesign-r-collaboration?locale=en

- ZDHC Foundation (2020) *Demo of implementation Hub*

- ZDHC Foundation (2020) *Demo Supplier to Zero*

- ZDHC Foundation (2020) *Like-minded organizations form an alliance of resources for the global value chain.* Available at: https://www.roadmaptozero.com/post/like-minded-organisations-form-an-alliance-of-resources-for-the-global-value-chain

- ZDHC Foundation (2020) *ZDHC contributors 2016-2020*

- ZDHC Foundation (2020) *ZDHC Impact Report.* Available at: https://www.roadmaptozero.com/impact-report

- ZDHC Foundation (2020) *ZDHC staffing 2018-2020*

- *Z*DHC Foundation Standard Operating Procedure document (2019) *10 Steps for Project Management and Delivery*

- ZDHC (2019) *ZDHC Brands Converge their Screened Chemistry Programmes*. Available at: https://www.roadmaptozero.com/post/zdhc-brands-converge-their-screened-chemistry-programmes-2

Appendix VII. Rubric At-a-glance

Table vii.1: Rubric At-a-glance

MINIRUBRIC			
Context		Maturity	

INITIATIVE QUALITY		INTERMEDIATE OUTCOMES		LONG-TERM VALUE	
A. Design and Implementation		**B. Precondition**		**E. Impacts and Sustainability**	
A1. Right design	Conducive	B1. Changing the narrative	Conducive	E3. Environmental sustainability	Partly Conducive
A2. Alignment	Partly Conducive		Partly Conducive	E4. Financial sustainability	Unconducive → Conducive
A3. Good implementation	Conducive	**C. Levers**		**F. Scalability**	
A4. Proper monitoring and adaptive management	Partly Conducive	C1. Transparency	Partly Conducive	F1. Scale-up	Partly Conducive → Conducive
		C3. Innovation	Unconducive → Partly Conducive		
A5. Good communication	Partly Conducive	C5. Business Models	Unconducive → Partly Conducive		
		D. Cross-Cutting Lenses			
		D2. Organisational and network effectiveness	Partly Conducive		
		D3. Convening and collaboration	Partly Conducive → Conducive		

Appendix VIII.Additional Information – Context and Maturity

Quotes on Context

"The first six brands that were targeted by Greenpeace, the discussion was 'are we really polluting?'. Those six companies had to develop a methodology, because nobody was testing wastewater for chemicals. To check whether it was true or not, we created a methodology. […] It clearly showed that there were pollutants in wastewater. That was pre-ZDHC. Then the MRSL was created and ZDHC too."

- Value Chain Affiliate

"ZDHC is gaining the momentum from the industry, from government agencies and different stakeholders, the expectation of a responsible chemical management is also very strongly promoted at UN level. It is a global trend; we are riding on a wave."

- Value Chain affiliate

"The purpose that ZDHC is serving in the industry is very relevant, and increasingly so. The environmental crisis is becoming more and more relevant. ZDHC's strength is its relevance."

- Value Chain Affiliate

"The pressure on brands, regardless of governments, is increasing. Whether it is Greenpeace or other NGOs going after brands for toxicity, this will continue."

- External Stakeholder

"At its start, the strong driving force was NGOs, then they said, 'you are doing the right thing so we can relax a little bit.' The driving force shifted over to lead brands. Consumer awareness of hazardous chemicals is coming up. The impact of consumers is getting stronger. […] They are feeling the effects of global phenomena affecting their lives – COVID, air quality, global warming. It is forcing changes in their lifestyle."

- Retailers and Brands

"Five years from now, will governments, NGOs, the public be talking about sustainability? Of course. […] The UNEP, Global Chemical Outlook 2, they advocate everything that ZDHC has been doing! The context is definitely favourable."

- External Stakeholder

"44% (eight ZDHC brands) have slightly expanded the scope with additional substances while the four big fashion brands mentioned above have their own individual MRSL. Thirteen other Detox brands and companies, which are not ZDHC members, also have their own MRSLs, which are mostly more ambitious than ZDHC."

- Destination Zero: Seven years of Detoxing the Clothing Industry

"When there is a big wave like this, I would assume there would not only be one party that is interested in riding the wave, multiple parties are trying to get on. In different parts of the world, you have different similar initiatives. If there is a monopoly, it is not very healthy. You need competitors, it is healthy. We know

we are not the only guy on the street, if we don't perform well, we will lose trusted partners. That is natural and necessary."

- ZDHC Governance

"It is a challenging area because the value chain is scattered, and some actors are very small."

- Value Chain Affiliate

"The supply chain is fragmented, with many different process steps and stakeholders involved in creating a fashion item."

- The Business Case for Removing Hazardous Chemicals with ZDHC - Survey results March 2019

"ZDHC should be able to ride this crisis – it has good cash flow and credit. At the same time, the current context is hurting ZDHC. The ability of contributors to pay a membership is impeded. However, ZDHC is stronger than a commercial provider because there is economy of scale with multiple partners at the table. ZDHC will be under pressure to reduce the costs to supply chain actors."

- External Stakeholder

"There has been generally good momentum that has been knocked back by COVID – there have been industry layoffs in sustainability offices, and in the supply chain due to reduced orders. There is uncertainty for the fashion industry that will continue into next year. It will be a tough year for the fashion industry as a whole."

- ZDHC Staff

"There has been a lot of progress and focus on sustainability from all, it is good for the industry, even at the time of COVID. Still, people are not giving it up, it is a good sign of engagement."

- Value Chain Affiliate

"We have not lost any members yet – even in the era of COVID. The contribution fees, it is too good to be true. 80% of all contribution fees have been paid. We have challenges in communication and to keep up with that development we have on the ground. COVID is top of mind. We have some crisis planning in place, some shifts in our timeline."

- ZDHC Staff

"The focus on environmental sustainability, and now increasingly on circularity, is favourable for ZDHC, but there is a risk that the themes of climate change, greenhouse gas emissions, etc. supersede that of the toxicity of chemicals."

- External Stakeholder

"Climate change is now up on the agenda, but chemical management is not done and over with. Pollution is still happening. We should not be complacent and turn away from chemical management, it is a concern for me."

- External stakeholder

Quotes on Maturity

"The first board was formed in 2015. […] At the time, everyone was learning, the board, the management. Looking at the number of staff members, it grew dramatically. The complexity of the organisation grew a lot and transformed. Last year, we were very serious about the transformation of the structures, for instance the multistakeholder board structure."

- ZDHC Governance

"ZDHC grew from a focus on building tools and projects, it is becoming more strategic."

- External Stakeholder

"The organisation is on a journey from a start-up with a few generalists, to a global enterprise with multiple subject matter experts conducting daily operations, developing and maintaining ZDHC's tools and solutions, but most of all accelerating the implementation efforts of ZDHC's sustainable chemical management framework."

- End of Year 2019 Monitoring Report

"We have established a set of tools and services that will prime us for scalability. These include the ZDHC MRSL, Wastewater Guidelines, the Implementation HUB, ZDHC Knowledge Base, Innovation, Expert-Match-Making and the Piloting Platform."

- End of Year 2019 Monitoring Report

"When the foundation was created in 2015, we already had four years of a huge amount of work. Because of the lack of leadership, some brands had gone and done their own thing. There was a growing dissatisfaction with ZDHC' ability to bring this anywhere, because there was no leader, no board, no steering committee, no strategy defined, etc. Frank and his team inherited an extremely chaotic situation. Since then, they have done an excellent job getting things moving in the right direction."

- External Stakeholder

"When ZDHC became the foundation and Frank came on board, they started doing what is right. They made a lot of progress since then. […] The zero objective was a distraction, they would have made more progress sooner. […] There has been an evolution from brands getting together wondering what they should do, paralysed by the fear of Greenpeace and of not being able to meet zero, to becoming a foundation and more pragmatic."

- External Stakeholder

Appendix IX. Additional Information – Design & Implementation

Right Design

The grant design sets out 11 activity areas. At the mid-point of the grant cycle, activities associated with the creation of an innovation/match making platform (#9), with the strategic positioning of the ZDHC Academy (#8) and with the development of consumer facing communication (transparency) (#11) are widely recognised as core to the ZDHC Programme but are, as yet, works in progress with yields still to be felt.

> *Core Support Grant Activities*
>
> 1. Business case study
>
> 2. Circularity study
>
> 3. Expansion into raw material production
>
> 4. Marketing of the ZDHC Gateway
>
> 5. Sector Convergence
>
> 6. Targeted stakeholder management
>
> 7. Translation of ZDHC reference documents
>
> 8. ZDHC Academy
>
> 9. Innovation Match-Making and Piloting Platform
>
> 10. Consumer-facing communication
>
> 11. ZDHC Knowledge Base (Wiki)
>
> *Source: Grant Proposal*

- Early work was done with the Academy to enhance the functionality of its web platform and to translate training materials for use with Chinese speaking audiences. According to those familiar with the Academy, additional work is now required at a strategic level and in cooperation with other training entities to understand sector training needs and to standardise and harmonise services.

- Innovation pilots have been supported in a bid to replace harmful chemicals and chemical processes with safer alternatives and ZDHC has, in the past six months, launched a collaboration with an NGO that hosts an innovation marketplace. Meanwhile, the creation of a dedicated piloting platform is underway for a planned roll out within the next two years.

- Transparency related activities include: promoting the newly functioning Detox.Live public disclosure portal (supported through a separate Laudes Grant) that provides verified water discharge performance data from textile mills; discussions with signature brand leaders regarding the terms by which this first cohort of brands and retailers would publicly reveal their chemical management performance; and two research initiatives one exploring traceability options for the industry using block chain technology, the other developing consumer facing criteria and ratings to be linked to supplier Leader Programme conformance data. And, on transparency, ZDHC's leadership has broadened its activity focus from enabling information flow to consumers through brands to improving information flow across the entire supply chain.

Quotes on Right Design

As noted in the review report, a relatively small number of stakeholders were able to provide commentary on the design and implementation of the grant, specifically. Care has been taken to protect confidentiality, meaning that several candidate quotes have not been included.

<u>Need for the Grant</u>

"[Laudes Foundation] support is required, the industry is very fragile at this moment, very few people are actually making profits. It is a cost-driven industry."
- Value Chain Affiliate

"ZDHC was not very popular, they only had an MRSL and the wastewater guidelines. The Gateway was not advanced, the InCheck report neither. They needed to set up the infrastructure, translate documents, deepen their regional penetration. There are still some brands that did not want to get an MRSL. The progress was slow, it was very democratic. We are too nice. We were waiting and collecting everything. They needed funds to create platforms."
- Value Chain Affiliate

"This is a way to kick start and underpin the work around Gateway – fundamental piece. Lots of efforts develop lists and tools. Key difference is implementation – Gateway stands up as a repository that directs suppliers to a good shopping list of chemicals and also share data from wastewater. The grant has enabled us to build something that is scalable. Even if brands back away there is still a lasting value to having this data base."
- ZDHC Staff

"ZDHC needed help not in establishing a company and hiring people, but everybody will tell you there was no knowledge. They got this knowledge from the external guys. They needed help. The structure was a bit crazy, and the communications too."
- Value chain affiliate

"ZDHC membership not huge – not big revenue stream. Laudes funding used to expand team so not relying on brand expertise that would have been the alternative source of support. Brands often can't agree on how to work together."
- ZDHC Governance

"The brand Leadership Programme, it needs to be driven, the organisation needs independent funding to get it working, it cannot rely on signature programme funding."
- External Stakeholder

"Laudes money a godsend – allowed them to get out and be more independent and be seen as independent from industry [with systems and tools]."
- External Stakeholder

The purpose of the grant is, "to accelerate and scale ZDHC global impact by demonstrating the enabling role of chemistry, strengthening ZDHC organisational capacity, deepening geographical support in target regions/countries, and driving continuous improvement in the industry."
- ZDHC Grant Agreement and Proposal

"Very helpful. Given us a stable source of revenue while we focus on building the tools and processes, investing in staffing. Showing a credible programme inspires confidence. This is helping ZDHC gain trust and a reputation. This helps in attracting revenue streams. ZDHC in transition toward being self-financing."
- Brands and Retailers

"Grant has catapulted ZDHC forward – enabled geographic expansion, relationship building."
- ZDHC Governance

"Without the grant, it would have been "bare bones" – excel spreadsheet – nothing customised. Brands might have built pieces of this. Nothing holistic. Adapting tools that others using that would not likely have been scalable and much less well connected to the supply chain.
- ZDHC Staff

"Four to five years ago – ZDHC leadership was "spinning plates on sticks" and the board was adding plates. Reactive mode. With grant ZDHC has been able to be more proactive – building out with alliances, using the strategy as a guide."
- ZDHC Governance

Modality of the Grant

"Maybe 40% of the grant could have been entirely flexible. Develop a programme to address issue X. Fully defined grants are convenient for tracking, but areas open for evolving priorities are also helpful."
- ZDHC Governance

"Core grant - no set definition at the time; it was a grant to support what ZDHC does as a whole - activities, organisational dynamics, staffing - whatever it takes to help them achieve their outputs/outcomes. It wasn't what we would call a core grant now."
- Laudes Foundation Staff

Quotes on Alignment

"We had a redefining of strategic plan at the same plan as we applied for this grant, many of the strategic pillars are very well aligned. We saw this as a way to accelerate implementation, vertically and horizontally."
- ZDHC Governance

"The relationship between ZDHC and Laudes Foundation is deep, received grants, yes, but also have guided each other along."
- -ZDHC Staff

"Strategic planning started before C&A Foundation had a circular fashion strategy and theory of change at C&A Foundation. […] In the end, the grant was not set up to be a circular economy grant."
- External Stakeholder

"There is less strategic alignment now than was the case at the time the grant was being developed."
- External Stakeholder

"The toxics movement is a complex movement. Challenge in the safer chemical space, it is a relatively small world with relatively small funding. Laudes is up there with many big foundations, less than 10, funding safer chemicals. Laudes is moving out of that space."
- External Stakeholder

"ZDHC is committed to circularity – it is not an add on. Contribution to the field will be focused on chemistry aspects – ensuring that in recycling/re-purposing, we are not reducing one problem and creating another."
- ZDHC Staff

Good Implementation

The figure below compares total grant spending by activity, planned budget allocations to date and actual spending for the first 23 months to the end of June 2020.[25]
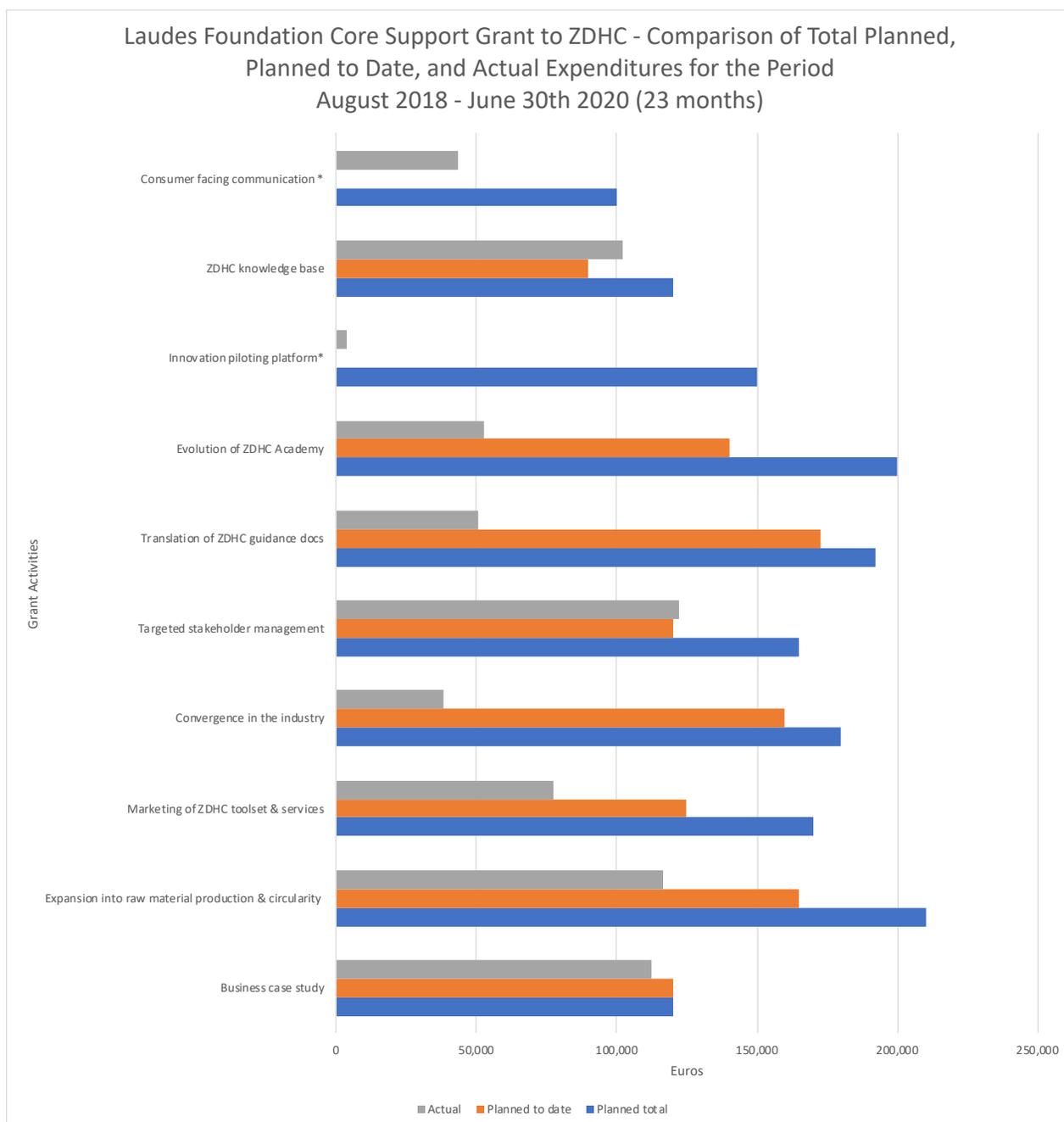
Source: ZDHC Core Support Grant Document, ZDHC End of Year 2020 Monitoring Report

To this point, spending is occurring across all activities and actuals are within indicative budget parameters in most instances. Differences in the rate of spending across activities is explained by ZDHC as a function of

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[25] Total grant allocations (i.e. not broken out by year) are given for the Innovation Piloting Platform and Consumer Facing Communication activities).

sequencing and of the relative time intensity of each activity, mainly. Differentials between planned and actual are explained mostly by the emergence of unforeseen circumstances through implementation. The spending picture is described below:

- **The ZDHC Business Case Study** (94% spent on budget) - The commissioning of this study was cued right at the beginning of the grant cycle with a relatively short period of duration.

- **Evolution of the Academy** (26% spent on budget) - After early spending on the academy platform and materials translation, ZDHC paused further development out of a growing awareness that greater synchronicity and standardisation is needed among entities providing chemicals management related training to the supply chain. As ZDHC engagement deepens in the regions and the Manufacturer and Chemical Supplier Leader Programmes gain traction, more attention is planned for this facet of the ZDHC's implementation hub.

- **Translation of ZDHC Guidance Tools** (26% spent on budget) - Spending has been slower than expected on account of the lengthening of time between MRSL updates. Now that MRSL 2.0 is launched, revised and newly created materials are being cued for translation.

- Innovation case studies (related to MMCF and DMF) documented in grant reports have been financed under the **Expansion into Raw Material Production and Circularity Activity** (55% spent on budget); this category includes the commissioning of the circularity roadmap that is now published.

- Work on the **Innovation Piloting Platform** (2% spent on budget) began in 2020 with the July launch of a collaboration with ChemSec, a third-party innovation platform. A ZDHC dedicated platform is to be developed over the second half of the grant period and is anticipated to draw the lion's share of the resources allocated.

- **Convergence in the Industry** (21% spent on budget) - One Chemical Management Framework - "Inditex, the list" has been fully integrated with the ZDHC MRSL, two others are at the latter stages of conformance and one convergence negotiation has been put on hold. Consultant costs are anticipated in the second half of the grant to complete convergence negotiations, as are management costs associated with the soon to be launched Chemical Supplier to Zero Programme.

- **Consumer Facing Communication** (43% spent on budget) - Two R&D projects are underway - neither having been specific in the design document - to address transparency and traceability in the supply chain for all supply chain actors (rather than just brands and consumers).

- **Targeted Stakeholder Management** (74% spent on budget) - Costs associated with setting up a senior management role and office to support ZDHC regionalisation.

- **ZDHC Knowledge Base** (85% spent on budget) - Covering the design and implementation of an information repository and wiki service to support users with implementation questions

Core Support Grant Logic Model Analysis

The grant's results logic model is set out below.

Table ix.1 Core Support Grant Logic Model

Goal	Accelerate and scale ZDHC global impact by demonstrating the enabling role of chemistry, strengthening ZDHC organisational capacity, deepening geographical support in target regions/countries, and driving continuous improvement in the Industry.						
Activities	**Outputs**	**Outcomes**	**Assumptions and Risks**	**Outcome Indicators**	**Outcome Baseline**	**Outcome Targets** *(end of project year 4)*	**Means of Verification**
Demonstrate the Enabling Role of Chemistry: - Conduct business case study - Conduct circularity study **Strengthen Organisational Capacity:** - Hire an FTE to build out content for raw material production, fibres and circular materials - Hire an FTE to conduct marketing for ZDHC tools - Conduct harmonization / convergence process with brand / retailer chemical management frameworks **Deepen Geographical Support:** - Conduct stakeholder engagement in target regions/countries - Translate ZDHC tools and training materials - Accelerate ZDHC Academy activities **Drive Continuous Improvement:** - Build ZDHC Knowledge Base - Create infrastructure for consumer facing communication by the Industry	- A published business case study that delineates the increased efficiency, cost savings and environmental impact reductions that come with implementation of ZDHC's chemical management framework. - The ZDHC's sustainable chemical management framework is widely adopted and implemented by ZDHC Contributors, Friends of ZDHC and industry initiatives. - A published circularity study that identifies and showcases research needs and innovations for replacing hazardous chemicals in the circular recycling process and creates a commercial need for scalable alternative solutions. - A communications programme and marketing materials that help to increase uptake of the ZDHC Gateway modules and related product offerings by organisations in the Industry. - A ZDHC Sustainable Chemical Management Framework that is converged with Inditex "The List", Levi's Screened Chemistry, and VF's CHEM-IQ and enables a common language in the Industry - Formal / established collaboration between ZDHC and key stakeholders in target regions/countries throughout the world. - Translations of an increased number and percentage of ZDHC trainings, guidelines, tools and modules into priority country languages. - Extended and regionally-specific content available for an increased number of trainings. - Showcases available for manufacturer pilots and invest in innovative substitutions / alternative technologies guided by brands, innovators and investors. - A ZDHC Academy and separate knowledge base platform that both reduce the root-cause analysis cost and accelerate the learning curve for implementation of the ZDHC toolset. - Development and piloting of a framework for consumer engagement with information on chemicals in products through different channels.	#1: Reduction and removal (phase out) of hazardous chemicals use and uptake of safer and innovative alternatives by companies in the Industry supply chains #2: Uptake of a practical circularity roadmap by the Industry on chemicals research needs, innovative chemistry solutions and applicability of new business models #3: Increase in the number and type of innovation pilots and related investments made to bring safer and innovative chemicals/ process/ technology alternatives to scale #4: Increase in the convergence of chemical management frameworks and a harmonized implementation by brands #5: ZDHC serves as the Industry's central platform for improved decision making and performance throughout the chemical management process. #6: Uptake of a consumer communication framework by the Industry that contains chemicals information aligned with ZDHC	**Assumptions:** - A compelling business case will move companies to adopt the ZDHC MRSL. - Companies will implement safer and innovative chemistry if they have the necessary information on performance, technology and the business case for investments and brand sourcing commitment. - Brands are willing to partake in a convergence process and integrate their internal chemical management standards into the ZDHC Gateway. - Increased number of translations will allow increased adoption of ZDHC tools and modules. **Risks:** - Adoption and implementation of the ZDHC tools are slowed down due to limited awareness, language and resources barriers, lacking innovations in the Industry. - ZDHC's tools are used solely for CSR guidance and are not incorporated to Industry sourcing requirements. - Convergence and harmonisation activities are significantly slowed due to confusion around different terminologies used by Industry chemical management standards.	**Outcome 1a KPI:** % and type of *strategic priority* companies (to be defined by ZDHC) using and endorsing the ZDHC MRSL across their supply chains and networks. **Outcomes 1b KPI:** % and type of brands and retailers above €1 billion in annual revenue that show an increase in progress ratio under Leader Programme. **Outcomes 1c KPI:** Number and type of facilities using of ZDHC tools, Academy offerings and Implementation HUB projects **Outcome 2 KPI:** Circularity roadmap on chemicals publically available to the Industry as reference document, including ZDHC's role for circularity **Outcome 3 KPI:** Number and type of innovation pilots launched and respective showcases available **Outcome 4 KPI:** % reduction in use of non-ZDHC approaches to sustainable chemical management among brands and retailers above €1 billion in annual revenue. **Outcome 5 KPI:** Formal collaboration with % and type of *strategic priority* organisations (to be defined by ZDHC) for multiplication of ZDHC activities primarily based on the recognition and use of the ZDHC Programme. **Outcome 6 KPI:** % and type of brands and retailers above €1 billion in annual revenue that use consumer-facing information on chemicals in products	**Outcome 1a Baseline:** ca. 40% **Outcome 1b Baseline:** 0 **Outcome 1c Baseline:** 500 **Outcome 2 Baseline:** 0 **Outcome 3 Baseline:** 1 **Outcome 4 Baseline:** 0 **Outcome 5 Baseline:** ca. 30% **Outcome 6 Baseline:** 0%	**Outcome 1a Target:** 100% **Outcomes 1b Target:** 70% **Outcome 1c Target:** 8,000 Year 1: 2,500 Year 2: 4,000 Year 3: 6,000 Year 4: 8,000 **Outcome 2 Target:** 100% (roadmap published) **Outcomes 3 Target:** 10 Year 1: 2 Year 2: 3 Year 3: 3 Year 4: 1 **Outcome 4 Target:** 50% **Outcome 5 Target:** 100% **Outcome 6 Target** Year 1: 5% Year 2: 15% Year 3: 30% Year 4: 50%	**Outcome 1a:** number of ZDHC Contributors, Friends of ZDHC **Outcome 1b:** Number of ZDHC Signatory Brands (above €1 billion in annual revenue); annual baseline reports under the Leader Programme **Outcome 1c:** Number of active facility users of Gateway, Academy and Implementation HUB **Outcome 2:** Circularity roadmap on chemicals published on ZDHC website and featured by leading print and social media **Outcome 3:** Number of innovation case studies in Knowledge Base available **Outcome 4:** market share of / number of priority chemical management programmes converged **Outcome 5:** Number of MoUs / collaboration agreements signed and active Outcome 6: Number of ZDHC Signatory Brands (above €1 billion in annual revenue) using the consumer information framework

The grant log frame is anchored in four activity work streams described in a narrative as essential to, "successfully move the industry to replace harmful chemicals with safer alternatives and support industry movement toward circularity." These work streams and the results flowing from them are referenced to ZDHC's 5-year Strategic Growth plan. A single output flows from each activity in a logical sequence. Six of 11 outputs describe products and services over which ZDHC (with grant support) has substantial control, as is appropriate. One (#9) is ambiguous in its wording. Four (#2,5,6,10) are suggestive of later stage results over which ZDHC does not have direct control.

Six outcomes describe strategic value chain shifts over which ZDHC - but not the grant itself, has a plausible degree of influence in the four-year time frame. The wording for outcomes #5 and #6 is ambiguous, likely reflecting the state of thinking at the time over what the desired change in these areas would be. All outcomes contribute to one or more of the strategic plan KPIs. Indicators for Outcomes 1, 4 and 5 align squarely, the rest describe performance related to strategic plan PRA strategies; that is, they are supportive.

Indicators, baseline and target data are attached to each outcome and, for the most part, appear appropriate to those outcomes. Some relate to contributor/user engagement with various aspects of the ZDHC Programme. They include: the number of Gateway, Hub or Academy users and, in so doing, satisfy the Laudes Foundation requirement to reference at least one reach metric in the suite of Foundation wide coverage measures. On these, it appears that at the outset of the grant, the target laid out for the end of year one (September 2019) was already achieved raising a question about the level of ambition in this instance. Other indicator types relate to products resulting from collaborative inquiry or negotiation processes over which ZDHC would have influence but not control. Examples are: the presence of a publicly available circularity "roadmap", and the number and type of innovation pilots launched and showcased. A third class of indicator is focused on contributor performance. Examples are: number and type of brands above €1 billion in annual revenue that show an increase in progress ratio under the Leader Programme and, percentage reduction in (industry) use of non-ZDHC approaches to sustainable chemical management among brands and retailers above €1 billion in annual revenue. One exception in the matching of indicators to outcomes is the set for Outcome 2. Outcome 2 is looking for "uptake" of the circularity roadmap. The indicator and target are focused on the production of the roadmap itself which aligns more with an output level result and is clearly antecedent to industry "uptake".

Three impact level metrics with targets are included in the log frame; they are not referenced to any particular outcome statement; they appear to be at a higher level of result. Two relate to Leader Programme performance at the brand and supplier level, one to the conversion of successful pilots into additions to the MRSL. Until the March 2020 contract amendment, these were listed in the Implementation Monitoring & Evaluation and Disbursement Schedule as target requirements for disbursements. They have since been modified as explained under **Section 4.3 – Good Implementation**.

Quotes on Good Implementation

"There is the 18 September announcement from the Sustainable Apparel Coalition, ZDHC Foundation, Textile Exchange and the Apparel Impact Institute unveiling a new partnership to drive new efficiencies for the industry, including within partner organisations."
-    ZDHC Staff

"Grant has enabled some efficiencies: staffing - more people on board, better specialisation (engagement, materials). Regionalisation brings efficiency, on the ground for events to engage in local language (language has been a great barrier – in Turkey and Italy). Revamping website with more languages. Has reduced transaction time when stakeholders come with questions."
-    ZDHC Staff

"A big challenge is COVID, it means onsite visits cannot be done, you rely on technology a lot more. It is important that those platforms can have verified data, regardless. A priority is to make sure that different types of verification can be put in, to maintain the integrity of the whole system – despite the fact that auditors and brands cannot do their visits and their checks."

- External Stakeholder

"ZDHC works with middle managers - compliance managers they have to sell to their senior leadership. This slows the process."

- ZDHC Staff

Quotes on Proper Monitoring and Adaptive Management

"Without KPIs, can't track performance of strategic plan. Blind leading the blind. Don't know where we need to put our resources. To this point have focused on finances, adoption of gateway (product numbers and money), in-Check reports and cleanchain reports. We get KPIs on adoptions but not so much on performance to date. It is improving though. In two years have gone from pretty much no data to insufficient data. Expecting that in next few months will start to have a fuller suite of data to work with."

- ZDHC Governance

Communications

A random selection of sources reviewed the publication, Detoxing the Fashion Industry for Dummies as follows:

- **Textile Focus -** "The book simplifies complex realities and offers valuable insights into how to take action and implement already proven innovations to accelerate change. " http://textilefocus.com/about-us/

- **Ecotextile News** – "For those unfamiliar with the topic at hand, the manual 'for dummies' offers foundational information about why chemicals are used in apparel production, whether they're dangerous, whether they're necessary and what alternatives are on the horizon. Giving context, it continues by detailing the environmental impact chemical usage has on both the natural world and human health, before serving up optimism of an industry transition to safer chemistry and new innovative practices." https://www.ecotextile.com/2020041525959/dyes-chemicals-news/zdhc-dummies-manual-breaks-down-textile-chemistry.html

- **Pebble Magazine -** A free new book helps anyone understand the complex global supply chains and toxic chemical use in fast fashion, so we can all make different choices when it comes to our clothes. https://pebblemag.com/news/this-new-free-book-will-help-demystify-fast-fashions-toxic-secrets

- **Reverie Page** - The book has a focus on demystifying chemicals and fashion - a largely obscure area for fashion lovers to date - and it traces the journey of 'detoxing the supply chain in a simple, clear and transparent way. https://www.reveriepage.com/blog/detoxing-the-fashion-industry-for-dummies Reverie page

- **Interlaced** - A guide to this sustainable fashion revolution in chemistry it is packed with details about how apparel production works, what goes into the process, how it can impact the environment and tangible actions taken by brands to solve

this. https://www.interlaced.co/article/detoxing-fashion-for-dummies-zdhc-foundation-releases-a-free-book-to-drive-action-on-chemicals-in-fashion-1587321573

- **Forbes** – "Consider, for a moment, that a quarter of the world's chemical output is used to make textiles (some 8,000 different chemicals are used across the industry). And while most of those substances are safe when handled properly, many others escape into the environment, polluting water and endangering lives. As many as 100 million people in India don't have access to safe water, for example, in large part because of industrial pollution. Luckily, it's possible to make apparel without environmental harm. That's all according to Detoxing the Fashion Industry for Dummies, a digestible new guide that's free to download and released by the Zero Discharge of Hazardous Chemicals Foundation, or ZDHC, an industry group launched in 2011 to eliminate dangerous substances in the apparel industry."

  https://www.forbes.com/sites/elizabethlcline/2020/05/30/7-ways-brands-can-curb-toxic-chemicals-and-drive-sustainability/?sh=7fe834157d72

Quotes on Good Communication

"Laudes Foundation reporting has helped us tremendously in getting the impact report together. Strat plan KPIs are consistent – some at a higher level."
- -ZDHC Staff

"ZDHC management, does quarterly project development reports to the board. It is an overall project report. I am exposed to that. Laudes is expecting a similar report. I imagine it is challenging to distinguish the contribution of the grant. The management aggregates the different sources of funding, hard to trace it back to the grant."
- ZDHC Governance

Appendix X.   Additional Information – Precondition

Quotes on Collaboration Within the Apparel Industry

"The pace and the rate of change and growth has been and continues to be extraordinary, and the more signatory brands that come into ZDHC and have the ability to influence the creation of the tools in a way that means they can be applied is ultimately what creates success and determines to what extent ZDHC can create industry change."

- Impact Report 2019 (Interview with Annie Francis)

"It got more traction. The industry is coalescing around ZDHC. In other areas of work, there are a lot of organisations. ZDHC has done a very good job of pulling the industry together. There is a lot of momentum and stakeholders."

- External Stakeholder

"Is ZDHC's greatest contribution all the tools it has produced, or its ability to bring together all these actors in apparel and get the push/pull to get results? In the footwear and apparel space, they are unique. They are playing the role of conveners. Greenpeace put a lot of pressure on the industry, and the industry had to do something. The SAC is industry-driven, but it deals with less pressure from outside the industry. You can see that in how quickly ZDHC has grown and who is at the table. A key strength of ZDHC is the presence of major brands, but there are still important brands that refuse to join."

- External Stakeholder

"There are other actors – SAC, Goblu, etc. – they are doing similar work but ZDHC is in the better position. The magic of ZDHC is that it is close to the brands and increasingly to the chemical suppliers. ZDHC has brought them closer together – this gives them wider scope to engage

- Associate

"At the beginning, brands were not used to communicating with each other. Brands progressively realised that they were dealing with similar issues, using similar strategies. They realised that there was added value in pre-competitive spaces. It only began after 2011."

- Associate

"A big benefit of ZDHC is getting people together. More collaboration is needed, that will show in the coming years. One of the first things they worked on is the wastewater part, their great success was bringing people together, accepting to collaborate even though they came from different places. It was hard work."

- External Stakeholder

"Where they have changed things is the collaboration, pulling everybody together."

- External Stakeholder

"ZDHC now has a clear voice within the industry."

- Value Chain Affiliate

"ZDHC is now recognised as the key platform for chemical work."

- Retailers and Brands

"ZDHC was very much founded in response to the Greenpeace campaign, a lot of its momentum is based on that. Now in 2020, a lot of these commitments are coming due. ZDHC has been riding this wave and trying not to let this be a timebound initiative"

- External Stakeholder

"We are getting away from various questions that we used to get – 'so you are part of Greenpeace then?', 'no, we are not.' There was a lot of confusion. We decoupled ZDHC from being a response to Detox my Fashion."

- ZDHC Staff

"In January, on a panel, Greenpeace passed the torch to us – 'we are still watching, do not get too comfortable, but you are running now.' They wrote a detailed case study where ZDHC fills a page. We now have an existence outside of Greenpeace."

- ZDHC Staff

Quotes on Chemical Management Practices

"I really think a lot is due to Greenpeace. They put the finger on a very sore spot in the fashion industry. Fast fashion, toxic chemicals. They were taking the pulse of the textile industry and succeeded at bringing that to the attention of the brands, and spurring action. ZDHC would never had been created if it had not been of Greenpeace."

- External Stakeholder

"The change in narrative was mostly thanks to Greenpeace. Currently, for instance, the wastewater for MRSL components, there is no detection. Greenpeace said that 11 chemicals should have zero discharge. We took that, the commitments we made by 2020, how to do it? We were looking at inputs. But then we realised that it would not suffice: we widened our perspective and turned towards input-process-output. Greenpeace pressured the brands, brands created ZDHC using Greenpeace's target."

- Value Chain Affiliate

"We have transformed the industry by creating a systems-approach for input management of chemicals. Our focus is holistically from production processes to products along with the output control (e.g. wastewater). We have enhanced the scope from consumer protection to protecting people's well-being and environmental conditions in production regions across the globe."

- Impact Report 2019

"ZDHC has developed a lot of good practice, but not much accountability. The Brand Leader Programme that is coming along, that will show how well they are policing things and hold people accountable."

- External Stakeholder

"Having tools, having converged, how do you prove the implementation? We have a framework of Leader Programme. We started with the Signatory Brands Leader Programme; it has been assessed by KPMG."

- ZDHC Staff

This topic is further discussed in different sections – relevant quotes can be found in *Appendix XI* *and* *Appendix XIII.*

Appendix XI.   Additional Information – Levers
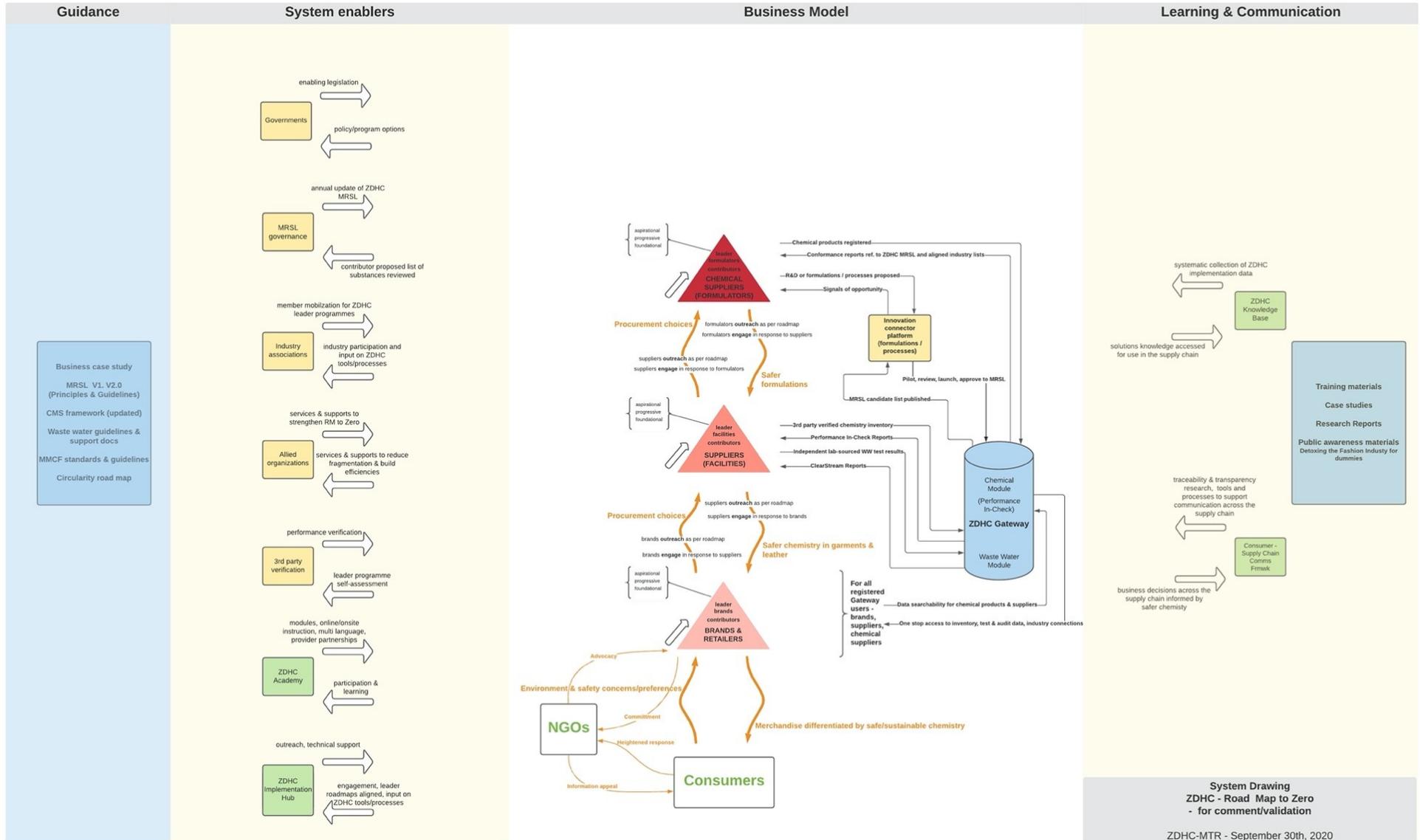
This system's drawing represents the MTR team's understanding of the ZDHC ecosystem as it will at the point of completion in the coming weeks/months. The middle of the drawing shows the key elements of the ZDHC business model. These include the three tiers of the supply chain, each with their respective Leader Programmes. The thick arrows between each level show procurement choices outwards from the brands and specified products coming back from chemical suppliers, in response. Lines between the Gateway and the manufacturers and chemical suppliers show information/data flows related to chemical substances and chemical supplier information, as well as manufacturer data including chemical inventories and wastewater discharge data. This Gateway is a source of information that allows chemical suppliers and manufacturers to differentiate themselves based on good chemical management practices and attempt to improve their market position vis a vis their buyers. The drawing shows consumer demand and NGO influence conditioning brand choices.

To the left of the business model is a sequence of system enablers. The two at the bottom of the column are ZDHC bodies (The Implementation Hub and the Academy), the rest are independent entities that influence the performance of the supply chain participants. In each instance, "needs and yields" are identified to characterise the basis of the relationship.

To the right of the business model are two learning and communication functions that also support the actors of the business model. Again, "needs and yields" are identified to characterise the relationship.

On the extreme left is body of ZDHC guidance documentation for all that are involved in this ecosystem. On the extreme right is a body of ZDHC learning materials that help build the understanding of those involved in the ecosystem.

The drawing was made, principally, to guide in the development of review questions and to assist in the interpretation of data. This iteration of the systems drawing has been reviewed by ZDHC.

Business Model – Roadmap to Zero Programme

At the time of launch of the core support grant (mid-2018), the following elements of the ZDHC business model were already in place:

- A 2014 revision to a joint roadmap to address the challenge put to the fashion industry in 2011 by Greenpeace - zero discharge by 2020
- Leader Programmes for brands and manufacturers (iterations back to the beginning with Greenpeace)
- An audit protocol to support consistent tracking of chemical management across the supply chain (2015)
- MRSL (v. 1.0 - 2014; V. 1.1 - 2015)
- Chemical Management Systems Manual (2015)
- Wastewater Discharge Guidelines (2015)
- The Gateway (piloted in 2015, Chemical Module released in 2016)
- Facility Discharge Registry/Disclosure Platform (launched 2017 with Laudes support)
- MRSL Conformance Tool for Manufacturers (launched 2018 with Laudes support)

The following, taken from interviews and ZDHC documentation, are current signals of progress on the development of the business model for sustainability:

- Brands showing improved MRSL conformance and water quality test data in their supply chains over the past three years.

- New textile industry signups as ZDHC contributors (21 to 35 between August 2018 and September 2020).

- ZDHC regional directors reporting factory interest in the Supplier to Zero Programme and about 120 Gateway sign ups globally since July 2020; and in follow up encounters with 160 chemical formulators as yet unregistered in the Gateway, reporting an 85% success rate in convincing them to do so.

- A case example showing positive market prospects and business success for manufacturers producing DMF solvent free polyurethane in leather products following a ZDHC led pilot to find a substitute (2017-2020).[26]

- A softening of chemical supplier attitude toward ZDHC from 2018 to 2020, as a result of outreach through industry associations and engagement in the design of the Chemical Supplier Leader Programme: new sign ups as ZDHC contributors (29 to 49 between August 2018 and September 2020), registrations on the Gateway Chemical Module and uploads to the data base.

- Mutual recognition/cooperation agreements with five certifiers and 21 lab testing entities to assess MRSL conformance including with several bodies with longstanding and sophisticated chemical management methodologies of their own, chemical data bases and supply chain service offerings.

- An announcement in ZDHC's September 2020 e-newsletter to Gateway users that Brands are now able to see Performance InCheck and ClearStream reports of their manufacturers and can request connections with other manufacturers in order to be able to access their performance data.

Quotes on Business Model – Roadmap to Zero Programme

"There is nobody else out there occupying this space, at least, not in the same way. In contact with many associations. Colourants, auxiliaries, plastics, textile mills in China – but these are all very different slices on the industry. Association of different levels in an industry supply chain is quite unique,"
- Value Chain Affiliate

"ZDHC realised that need to penetrate through the supply chain - educate suppliers from the bottom up so that everyone has awareness of the merits of safe chemistry. And then go beyond to education/awareness to standards, management and verification."
- Retailers and Brands

"Leader Programme good start. Most of the information collected in self evaluations is not readily available inside the brand. As well brands have different units of analysis. So for question like "How many suppliers have we trained?" - info not in one place. First round, a learning experience. Nobody had asked these questions in a quantitative way."
- ZDHC Staff

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[26] Dimethylformamide (DMF) is the commonly employed solvent for chemical reactions. DMF is a useful solvent employed for the isolation of chlorophyll from plant tissues. It is widely employed reagent in organic synthesis. According to the Centre for Disease Control, DMF is readily absorbed through the skin, inhaled, or ingested with deleterious effects on human health.

"In the first year, it wasn't clear to the brands what the Signatory Leader Programme was asking of them (terms of engagement). Questions asked: 'is this a ZDHC show, or can we have our own programme?' Not clear on the 'musts', the 'nice to haves', and the consequences of not complying."
-    External Stakeholder

"Signature Brand Leader Programme is a good concept. Brands needed to commit to MRSL and framework to measure. There was a leader scheme before with soft 2020 commitments. Now clearer what needs to be achieved."
-    Retailers and Brands

"Still trying to learn and build confidence. If we push too hard, it will discourage. Focus on gaps and resources to support. At some point will need to make clear what ZDHC KPIs are for brand leaders to follow. Need to establish a minimum threshold for participants. This will come with maturity. Need to ward against brands joining to simply look good – green washing."
-    Retailers and Brands

"What is more desirable when working with brands – move fast with few or slower with many? It depends how many you leave behind to really move forward."
-    External Stakeholder

"Performance In-Check Report is costly for suppliers. The issue is this: $1,400 to join gateway (as a supplier) for a data base that is not fully functional as yet (missing – we don't have all the chemical registrations that need from industry) Right now can only get 50% of the information they need on the chemicals in their in-check reports. There is a push to get more chemicals in the data base. Brands are asking the suppliers to join and encourage their formulators to register."
-    Retailers and Brands

"It is critical that all brands engage their supply chains. Can have super sustainability focused companies with badly performing supply chains – not good enough."
-    Retailers and Brands

"For ZDHC, the middle part of the supply chain is critical. Will a leader scheme with levels (foundational, progressive, aspirational) - make a difference keeping business based on sustainability criteria? Needs to be watched carefully."
-    External Stakeholder

"Very much involved in designing Chemical Supplier Leader Programme – concept stage. Expectations from the brands and chemical companies are being fed in. Process takes time. General modelling on leader programming for brands."
-    Value Chain Affiliate

"Gateway has become more accepted, a go-to place for brands, to use the Gateway to engage in assessing the chemical performance and the conformance to the MRSL. Now used actively for wastewater reporting and disclosure. As it gets more data in there, we start to see that you can join the dots between input chemistry and what is the result of the affluent – the wastewater. It takes time."
-    External Stakeholder

"Gateway – important to understand entry points; there are many – it is about how to connect platforms together. Data entry in one place should migrate to that it can be used in an integrated manner. It is less about having one massive platform and more about creating ways for platforms can talk to each other. Requires that we identify the overlaps and complementarities then focus for impact – and have the technology that allows easy flow/use of info."
-    Associate

"Gateway – 18 months ago issues around getting formulators to upload. Worried that we had created a "Rolls Royce" with no fuel on board. Engagements with supplier bodies are now making a difference.
- ZDHC Governance

"Improving data quality in ZDHC Gateway is key to the success of the initiative. The post-pilot period revealed some major challenges faced throughout the evolution of In-Check."
- MRSL Conformance – Self Evaluation Report (Dec. 2019)

"The Gateway needs to be much more user-friendly. A small company in China has a lot more data than the gateway."
- Value Chain Affiliate

"It is hard to get everyone to collaborate. They need to see a benefit for themselves. We are making a lot of efforts so there is a return to chemical companies as well, so they can showcase their products, get visibility, get new clients, etc."
- External Stakeholder

"Wastewater guidelines, one of the best that came out. We are working on leather, it will also come. That is a benchmark. Most of the brands, external governments, are realising and accepting this as a standard. MRSL, even though I don't like it, it is another one that is also good, it is a starting point.
- Value Chain Affiliate

"Improving data quality in ZDHC Gateway is key to the success of the initiative. The post-pilot period revealed some major challenges faced throughout the evolution of In-Check."
- MRSL Conformance – Self Evaluation Report (Dec. 2019)

"Yes, there have been software issues and underuse. All made more delicate by ZDHC making larger than life claims early on that set the expectation marker very high. At the same time, ZDHC has created strong revenue stream from transactions. It is fascinating and potentially transformative"
- External Stakeholder

"I would like to see that level of detail (which certification, what was assessed, when, etc.) and why it is level 3. If I don't see that, I don't know if I can trust the information. What is the different between level 2 and level 3 in this case? If you hesitate between two products, and you have a supplier agreement, you don't know why a level 3 is added value compared to a level 2."
- Associate

"Normally, a certifier service is paid in time and material. If somebody does more, it costs more. Now the market says, ZDHC, you have approved five service providers, each one can do their own thing, and the outcome will be the same – I will get a ZDHC certificate. So as a supplier, why would I get my certificate from more expensive service providers?"
- Value Chain Affiliate

"The downside is the scale of it all, they have a lot of competing demands. We end up needing to triage. It comes back to the need for product management – someone needs to converge that and establish priorities. I am also concerned with the competing commercial interests. There are many service providers that are trying to compete with what ZDHC is doing. I hope ZDHC can stick to their strengths and hold the fort."
- Value Chain Affiliate

"Speed of implementation of the business model not fast enough. Suggested changes to the Gateway put off to 2022 (reference to colour groupings among registered substances). From a business point of view, ideas should be rapidly explored in some multi-stakeholder triage process and filtered by urgency. Then

task forces assigned that involve relevant organisations that are able to add in. Want ZDHC to me more powerful in leading these kinds of processes."
- Associate

"For chemical suppliers - transactional costs can't be too high - they need to be justified. There are savings in the system though elimination of double testing. Chemical companies were already paying for certifications prior to ZDHC MRSL. Overall, the burden of participation is a little bit more costly than before and not fully compensated in the market, yet."
- Associate

"Chemical company – No proof yet that chemical suppliers have gained more business through ZDHC (but we may not have lost); reason might be that brands and retailers have not implemented their commitments to drive their suppliers to buy MRSL conformant chemicals."
- Associate

"Business case – not yet stable, but improving. ZDHC contributor community grown to more than 100 orgs – from 50 just a few years ago."
- Associate

"ZDHC is most expensive supply chain sustainability project and there is not yet a solid business case for suppliers to adopt ZDHC. Have tried to prove it, but have not been able to. Still too young and new."
- ZDHC Governance

"In my company – have to be able communicate the business case. Absolutely believe that we still need to prove the business case."
- Brands and Retailers

"For the brands that participate, they need to get a positive consumer response; if price continues to rule then this is bad for the whole supply chain."
- Value Chain Affiliate

"Being good on the Gateway does not lead to more orders. ZDHC should impose that if you order from aspirational members of Suppliers to Zero, you don't order from others. That way the supply chain will improve."
- Value Chain Affiliate

"A Harvard study came up last week, brands are not backing their preferences with orders. Not if you are more expensive than the mill next door. That's why we need brave next steps. The study was referenced on Ecotextile news. It is an absolute statement of the obvious. You have two modes of operations: check factories then buy, or buy and then check. Most brands nowadays do the latter. But once you have placed your order, you have basically approved everything in the supply chain. We need to go back to check then buy."
- External Stakeholder

Quotes on Innovation

"The amount of technical work on tools has held us, as a result we have not been able to focus as much as we wanted on innovation. It has been identified as a priority going forward."
- ZDHC Governance

"Not enough progress on the side of innovation. How to bring more innovative solutions to the market? No significant scale has been achieved in this regard. Also, how ZDHC can support some of the start-ups. That

is not a large part, no significant work done there. There is huge market interest, even from the textile supply side, we want to explore more innovative solutions."
- Value Chain Affiliate

"There is a lot of innovation that could be useful, e.g. innovative hardware, non-invasive water measuring equipment, air quality. I don't see a lot of discussion around that topic. There might be a potential to convene innovators and bring about change in the industry. ZDHC needs to be careful though, not to lose sight of their game plan and be distracted."
- Value Chain Affiliate

"Innovation - too slow. Formaldehyde list on hold till MRSL 3.0 why? There are already legal limits on its use. Suggest that ZDHC is well placed to convene multi-stakeholder platforms (chemical formulators and industry) to address items on the candidate list. This is an important niche role for ZDHC.
- Associate

"Innovation – chemical legislation and ZDHC responsible for triggering many innovation processes among chemical companies. Opportunities for chemical companies, for finishing companies and around circularity (innovation for the manufacturers – how to design products so that the materials are safe to be used in a circular process)."
- Associate

"There is a still a lot of work to do on circularity. Many people have started to work on circularity. ZDHC is the right place to do it, we have a lot of competent people. What is a use of non-compliant sustainable material? You will recycle it, it will fail. You need to understand the chemistry behind it."
- Value Chain Affiliate

"Just been introduced to circularity lately. So many things that need to address here. Concept is being pushed hard in the fashion circle. Can't ignore it. Recycling of chemicals is of critical importance. Priority on should be building relationships with the upstream industry on this. […] Need to make the business case to chemical suppliers. Chemical industry needs to commit to take back substances or make them visible in the loop."
- Retailers and Brands

"I don't think ZDHC has done much on circularity. I saw documents recently and shared my comments. But in the MMCF industry, the new standard touches on circularity, there is a loop."
- Value Chain Affiliate

"Has been introduced to the circularity concept for ZDHC – this is discussed lots in Europe. From chemical supplier point of view, "looking into it, but curbing enthusiasm". Need to look at what happens to chemicals - whether there is a good possibility for circularity."
- Associate

"Circularity, I don't see that as a core activity. There is a question of scope creep. Because of their success of pulling people together and influencing change, why wouldn't you ask ZDHC to do it? They have all the right stakeholders on board. Scope management is a challenge, and delivery of things to a certain level."
- External Stakeholder

"The barriers to bring new alternatives to market are quite high. With anything like this, there is avoidance of bad practice and the promotion of good practice. There is far more work to be done on avoidance of bad practice."
- External Stakeholder

"Circularity – chemicals should be safe and circular – need to be ok in the environment. Safe is a foundation for circularity. Circularity is on top of some supply chains (e.g. packaging). Driving innovation in a major way."
- External Stakeholder

"Circularity – is important for all of us because we can spare resources and energy – fear that expectations on circularity for ZDHC are too big. Need to start the thinking now. This is a long-term project. Circularity goal for the EU (30 years out) – Have to change whole supply chain processes (machinery, mindsets) – ZDHC should focus on gathering input from stakeholders – look what is already published and discuss across stakeholders, should develop a rough draft concept that expresses ideas only. In an iterative way it should develop concepts. Academia should be part of conversations."
- Associate

Quotes on Transparency

"A large part of what is happening is within the value chain. ZDHC has helped create a tremendous transparency between chemical suppliers and manufacturers. The database, we can access information in real time. And similarly between manufacturers and brands. Users upload their reports, brands can read them."
- Value Chain Affiliate

"The Gateway is available to members, you can go in and see chemicals that have met the MRSL pyramid. The wastewater data, some brands have disclosed their data. It is posted. They made fairly good progress around transparency."
- External Stakeholder

"The Gateway has probably led to some transparency, they get all this information about formulations, I believe it has helped a lot."
- External Stakeholder

"Making transactions in the system transparent is important. Despite the value in having trust relationships, it is important to have in place robust verification."
- Retailers and Brands

"It remains a bit early to speak of consumer-facing transparency. ZDHC contributed to things like OAR, the Detox Map and the Detox Live, they are good steps towards transparency but there is more to the way it is implemented."
- Value Chain Affiliate

"As ZDHC, how can we enable the brands to communicate to consumers? They need verifiable data, hence the focus on tracing and transparency."
- ZDHC Governance

"The key attribute is transparency: independent verification, disclosing data. What reductions have been made with these MRSL chemicals?"
- External Stakeholder

"Disclosure - comparing oneself is always risky, I have seen the power of a benchmark. As soon as disclosure happens, there will be comparisons. At the moment there is unfortunately no NGO pushing for disclosure – Greenpeace is quite pleased right now and has stopped pushing."

- External Stakeholder

"Disclosing information is key but there needs to be a push to do that. ZDHC needs to report on their progress. If the initiative does not have any consequences for the laggards, then what is the point of having the initiative? The frontrunners say the laggards need to report. You do not want to have an initiative that is open to everyone. If you are part of it then you should show the progress – you need to be serious."

- External Stakeholder

"ZDHC should drive transparency in a bigger way. KPIs around this are abstract."

- Retailers and Brands

"Is it okay for brands to be members but not be transparent about their results? I do not think it is acceptable. […] You need people to judge you on performance."

- External Stakeholder

"Tracing and transparency toward consumers, I have not heard much about this yet. The SAC and the Higg Index are about that. How to you put it all in one hand tag? It is a challenging idea, and it requires industry collaboration."

- Retailers and Brands

"The next level, which we work on now, is to take the data to external stakeholders. It is part of the portal, which is public. The next step is building capability within the existing tools and additional tools, so consumers can see which chemicals were used. That level of transparency and granularity is what we will be working on in the next few years. The programmes also need to be public facing, as opposed to internal value chain facing. Ultimately, consumers would also be able to view where facilities make efforts. We are working on that bit by bit."

- ZDHC Governance

Appendix XII. Additional Information – Cross-Cutting Lenses

Organisational and Network Effectiveness

To date, the collection and use of data to show impact, to report against the wider set of ZDHC Strategic Growth plan KPIs, has been hampered by:

- Time required to define the Brand Leader Programme scoring regime;
- Data entry inconsistencies and logic issues related to wastewater testing and reporting of chemical inventories by manufacturers;
- Time required to build a chemical library of MRSL conformant substances in the Gateway;
- Some COVID-19 related delays related to testing and third-party verification; and
- Chinese government regulatory constraints on access to information.

Quotes on Organisational and Network Effectiveness

Organisational Matters

"In the last years, we have been looking at organisational design. This is a shift from a completely entrepreneurial mindset to a mode where we are 'maintaining' things. We dedicate more attention to directing traffic."

- ZDHC Staff

"We just went through an intense phase of governance development. We updated our articles of association within the board. We are progressively moving towards a multistakeholder board. We are in the process of updating our processes and policies, increasing our level of sophistication and maturity. we have advisory groups and Roadmap to Zero Councils. We are also putting together a set of policies on anti-fraud and corruption, whistleblowing, anti-harassment, code of conduct – they are all in different places. They have different groups of people: staff, board, groups and councils. We are making them more coherent."

- ZDHC Staff

"A critical change is that ZDHC decided to transform the board into a multistakeholder board – not only to meet chemical industry demands, but to diversify its stakeholders. In the future, the board will include chemical suppliers, facilities, and third-party innovators in addition to brands. It is a good move, triggered by the chemical companies. Interactions like this are making both sides better. When they work together collectively, everyone wins."

- Value Chain Affiliate

"When I call up, each time I have to talk to many people for any single issue."

- External Stakeholder

"In 2017, we were a start-up, people wore a lot of different hats. There were fewer staff. As the Gateway has grown, staff are more focused than they were before. We are not siloed enough, perhaps. We do have people with different hats on. There is some confusion among brands because they have favourite people to go to, even when they are not the right contact people anymore."

- ZDHC Staff

Staffing and Expertise

"We have grown from 4 people to 25 now, we put new hires on hold during the pandemic. We wanted to hire ten people this year. There are definitely gaps."

- ZDHC Staff

"The external financial help assisted in growing more rapidly. We could hire a Partnership Director as part of the grant. […] He makes sure that everyone is onboarded."

- ZDHC Governance

"We could speed up things by giving the technical tasks to consultants, and the advisory group would comment on it. For instance, the parliament does not write laws, they comment on them. Members of Parliament are not experts in all fields, they are elected officials. In the future, consultants should create things, and we would comment on that."

- Value Chain Affiliate

"It is good that they still use the external experts, but you still need to have chemical expertise in-house, otherwise the councils will do whatever they want. It worries me that there are not enough experts."

- External Stakeholder

"They needed help not in establishing a company and hiring people, but everybody will tell you there was no knowledge. They got this knowledge from the external guys, the staff of contributors that gave their time. They needed help, and they still do."

- External Stakeholder

Academy

"We still lag with the Academy. It is doing well, but not to the satisfaction of certain board members. Looking into that to scale it further in terms of number of trainings available and number of participants. We still need to achieve full potential."

- ZDHC Governance

"The Academy has been left behind, it is very thin right now. I see huge opportunity for a reliable educational platform for every type of sustainability programme. ZDHC Academy could become that infrastructure – ZDHC made the case that the Academy is relevant not just to chemicals but to sustainability initiatives at large in the fashion sector, and beyond."

- External Stakeholder

"The Academy has been very passive and low profile. It is the slowest of the components. There are lots of need and potential to drive the understanding of the tools at different levels of the supply chain. There are not a lot of courses at the moment, there needs to be a range of trainings that moves from basic awareness

raising on the sector to a focus on specialist skills. […] The training approach needs to be professionalised and aligned with post-secondary/technical education with recognition for courses already covered. Personnel that have already covered the topics in school do not need to be repeating content."

- Retailers and Brands

Communications

"ZDHC brands itself in a very compelling way. The Impact Report online is great. ZDHC spent money wisely in hiring designers and graphists. They did a good job of simplifying a very complicated process."

- External Stakeholder

"Two years ago, the mission was there, but the marketing tools and external communications were not always clear. ZDHC has significantly improved that. They reflect on their market and what they need to do to get support."

- Value Chain Affiliate

"ZDHC does a lot more communications than before – its only as good as the people on the receiving end are trying to digest it. […] If you are involved in a task team, it is not hard to keep up with what is going on. But if you are working on ZDHC once every two or three months, it is very hard to keep up."

- ZDHC Staff

"Communication to stakeholders is a weakness. We want to get this communication issue sorted. Stakeholders complain that we provide them too much material to read, but we need them to understand it. It is the biggest weakness in rolling out the programme."

- ZDHC Staff

"ZDHC is overly complex, they are doing a lot. I believe that less is more. ZDHC is frenetic, money coming in, different programmes, different announcements, different events. That culture has always been there, but it is worse now. It is more frenetic. You see that reflected in the suit of tools and programmes. The Gateway, the different levels of conformity, it is very confusing to a lot of people."

- External Stakeholder

"Communications across the task teams are not as strong as they could be. Not sure participants see the interconnections. As a brand player, I experience the broken chain of communications within ZDHC's team – I need speak to many people at ZDHC to get the picture, it is exhausting."

- Retailers and Brands

M&E, Data Collection and KPIs

"ZDHC is much better at M&E than they were a few years ago, but very short of where they need to be. I am disappointed that they have not implemented a KPI reporting framework. The use of KPIs in board meetings is still rudimentary. They need to balance trust and verification. Resources are there to make this happen."

- External Stakeholder

"In wastewater, there has been no significant effort to collect a large body of data. Same with chemicals. We cannot say for sure that the water is cleaner. There is little in the way of data points. Collecting data helps people behave differently and think differently. But from an impact perspective, it is too early to tell."

-   ZDHC Staff

"Stakeholder communications are fine overall, but the story comes out a bit abstract around what ZDHC can and does achieve. KPIs focus on numbers and outputs, limiting the extent of evidence-based decision-making. Some KPIs are not being used at all, some are not clear. Some are not manageable. KPI development is still a work in progress. ZDHC might need to revisit and communicate these better. There is scope to improve what is being communicated outward: there are too many KPIs, denominators are missing, some KPIs are not meaningful, etc."

-   Retailers and Brands

"We will go toward disclosure in the coming years – but we need clear KPIs, and time to work on them. It will be possible to aggregate the data in some instances. More details will come through the Gateway in the future."

-   ZDHC Staff

"Without KPIs, we cannot track performance against the strategic plan. It is the blind leading the blind. We do not know where we need to put our resources. To this point, we have focused on finances, adoption of the Gateway, and in-Check reports. We get KPIs on adoption but not so much on performance to date. I am expecting that by the December board meeting we will start to have a fuller suite of data to work with."

-   ZDHC Governance

"When I look at ZDHC's claims, I never clearly see how they track how companies are doing. Is there full transparency as to what is going on behind that screen? I would like to see ZDHC explicitly state, 'Here's the methodology by which we defined safer.'"

-   External Stakeholder

Quotes on Convening and Collaboration

Convening

"At a high level, we do collaborate a lot. We spend a lot of time engaging with other private standard holders and other efforts. Thinking about how to pull in the same direction. We are a lot stronger now to talk to chemical suppliers and manufacturers in those areas."

-   ZDHC Staff

"We made some good progress over the past two years, the connection between ZDHC and some regional initiatives has been strengthened. We have put some MoUs in place with some organisations that work in the field, namely Solidaridad, IDH. Both are global programmes. And Unido. We are also working more closely with industry associations, they serve as multipliers, they have their own connections with individuals at factories and small brands. We can use their expertise to improve our outreach in those countries and regions."

-   ZDHC Staff

"4-5 years back there was a report of 15-16 brands that were supporting ZDHC. Over time, we have tried to expand, we have 30-odd brands now, and multiple chemical suppliers and factories have come on board."

- Value Chain Affiliate

Convergence

"What we have done has led to several other programmes coming to us and aligning with us. For example 2-3 years back, there were a lot of similar standards, 1-2 brand driven standards, they were creating a lot of confusion in the chemical industry. We have been able to converge many of these now, they work seamlessly with the Gateway, Screened Chemistry, Inditex's programme, etc. This has led us to a single cluster of information."

- Value Chain Affiliate

"ZDHC did a good job convincing brands to align with the ZDHC MRSL. Getting Inditex back was a great success. Aligning all these brands to engage in ZDHC MRSL is the second success."

- Value Chain Affiliate

"If you just go back five years, most leading brands were doing things in isolation. Everyone had their own tools, standards, documents. Now we are seeing a certain convergence around certain organisations: ZDHC, AFIRM, OEKOTEX, bluesign, etc."

- External Stakeholder

"I like that they are moving towards umbrellas, e.g. is a chemical formulation meeting the standards? […] They are allowing industry schemes to feed into their way of working. There will be factory appraisal systems that feed into an umbrella. They try to align and bring things together. It is much better than asking people to choose between ZDHC and bluesign, or ZDHC and GreenScreen, etc. They are very good at pulling people together."

- External Stakeholder

"Now there are many initiatives that are growing, all membership organisations. SAC, Textile Exchange, Fashion for Good, etc. Somehow if we could combine the efforts, we would not need to be members of all organisations. It would reduce the burden on the brands and the value chain. And a collaborative effort can be done. That needs to be explored more. There might be duplication of effort happening, everybody is trying to set up standards for the same things. Try to work in combined teams, speed up the work, reduce the costs. It is really important for the members, especially now with COVID, it is a difficult situation financially."

- Value Chain Affiliate

"Converging on one MRSL and on one solution, it is difficult. The fashion industry is very good at creating marketing events. It creates new organisations in cluster. There are overlapping areas, heavy duplication, little alignment, it creates challenges in terms of efficiency and convergence. We try to align and convene. It is still a work in progress, but we have a clear vision on where we want to land."

- ZDHC Staff

Collaboration to come Between SAC, AII, Textile Exchange, and ZDHC

"It is a small step in the right direction, historically there has been reluctance about sharing data. The real benefit will come when they collaborate truly, share the work and the costs. Together they can produce greater impact than alone."

- Value Chain Affiliate

"It sounds good in theory; I am curious to see where it goes. It is a very challenging and political situation, especially now that there are not a lot of opportunities to meet in person. I wonder how much progress will be made and when. It is hard enough to get brands to align within one organisation, now how to collaborate altogether? The idea is good though. […] There is collaboration, but also competition. If they spend too much time discussing how they interact with other people, they might lose sight of their mission and brands could go away. Now with COVID we could see some consolidation."

- External Stakeholder

"It can only be good in the long-term to bring convergence. Everyone has the same end goal. ZDHC is about chemicals, but also the sustainable production of product, doing things in the right way, moving towards a circular economy. Those facets are interlinked and very important. Just like the convergence of tools, it will be so much better for brands, facilities, and for reporting ultimately to the consumer and the public."

- External Stakeholder

Negotiations with Stakeholder Groups

"Most resistance has come from the chemical manufacturer side, the consequences on their business are the higher. They need to work on better formulations, change their suppliers, etc. We achieved a big victory last year, the chemical industry decided to participate. There continues to be challenges, the chemical industry is large and needs to be more and more involved"

- ZDHC Governance

"ZDHC acknowledged that the chemical supplier constituency has much to offer so they are now involved at the 'middle strategic level' as well as task team level (Programme team). Before, no such mechanism existed. It is important for chemical industry that we are recognised – in the beginning, we were consultants, now associates, now members and recognised as important stakeholders."

- Associate

"The chemical suppliers had to be involved."

- External Stakeholder

"The tension was very strong, and trust was not there. The chemical companies were undercutting ZDHC by not supplying their chemical information in the Gateway, they were paralysing the ZDHC vehicle. They were demanding some specific compromises from ZDHC in exchange for providing their chemical information. By the end of last year, the issue was resolved. They are now engaged but, they want to have a stronger voice in the whole programme. […] When I look towards the future, two years from now, it will be better than today. The chemical companies will have more trust in ZDHC and will feel more comfortable engaging in the programme. ZDHC will also appreciate the value of the expertise and the critical knowledge that the chemical industry provides to the programme."

- Value Chain Affiliate

"The tipping point was in 2019, once we finally got bluesign in there, and Inditex the List. It got to that critical mass and all parties are interested now."

- External Stakeholder

"There have been huge fights between ZDHC and the chemical industry, it ended up with a draw. No-one is really happy with the outcome. The chemical industry is the enabler, that view has been heard too much. It is true, but they also need to listen to the signals from their costumers, the brands. The brands listen to their own consumers, the public. The chemical industry is deaf to the consumers. The influence of the chemical industry should be slowly phased out – not eliminated, because we would be back to 2-3 years ago."

- External Stakeholder

<u>ZDHC as a Brand-led organisation with a Multistakeholder Board and Programme</u>

"ZDHC has been transitioning from a brand-driven initiative to a service provider who tells you what to do."

- External Stakeholder

"Bring the brands into more of a leadership role. ZDHC has intentionally made the brands as just any stakeholder. If the brands do not feel engaged, you will lose their buy-in. They are the ones who have the power to end relationships, to hit manufacturers where it hurts."

- External Stakeholder

"The brands should be in the driver seat. They are in the middleman position – they interact with regulators, NGOs, consumers, chemical suppliers. They are in the best position to seek compromise. If you empower the chemical industry too much, they will call the shots and they do not have to balance as many stakeholders as the brands do. The chemical industry is well represented within ZDHC, they have the technical background – a lot of the people involved on the brand side, they are sustainability folks, not really chemical folks. The sustainability people do not have the background to go head-to-head with the chemical suppliers, their technical expertise is not as solid."

- External Stakeholder

"The direction is generally pretty good, but it does not look good when you look at the composition of the board. You need people to judge on performance. As a brand, do you want greater scrutiny of what you do badly?"

- External Stakeholder

"I will be keen to see how quickly supplier start pushing in their own right such that it is not just the brands driving input chemistry and wastewater discharge. Right now, ZDHC is being soft."

- Retailers and Brands

<u>Geographic Expansion</u>

"Most of the manufacturing is happening in Asia, 80-90% is in Asia, some in Turkey. ZDHC can increase its presence in Asia, it is too European-centric because of the brands, it is convenient for them to attend meetings in Europe. In recent years, ZDHC has organised events in Asia, but they can do more."

- Value Chain Affiliate

"The first place they went to was in China. Recently they added a few more. India, the person is very well known to us. Pakistan, you need someone else, cannot be Indian. Engaging with them could be better, they are advanced, they want to learn, but they are not participating in such a way. Engaging with Taiwan, Vietnam, Cambodia, it is happening, but it could be much better. Korea, we are getting their support in the

task teams, Taiwan as well, but there is room for improvement. Only one person in Europe is not going to work. We need people in Spain, Portugal, Morocco, Tunisia. It is too much for the person in Italy, we need one more in the Mediterranean area. Central America, lost completely. No-one in the Americas. Scott does not have time to do what regional directors do. We need people in Latin America. Honduras, Brazil, Mexico, Argentina. Next year we need to have more staff internationally. All those people currently are very good, they are the right people. East Africa is also in my list. Fortunately, because of Klaas they went into East Africa, but it was because of a project. But there is more potential – Kenya, Ghana. Turkey is a big, big chunk. The brands are saying that they are pushing for it, but we want the manufacturers to come."

-    Value Chain Affiliate

"In term of geographic aspects, my observation is that so far ZDHC is still perceived as a European initiative, although there are some American brands very much engaged. I would say the whole American continent is not engaged with ZDHC. To me this is a big vacancy. It would be useful to have a director in the Americas. ZDHC will need to show how it is different, and that is mostly through implementation, and for that you need people who go down to the ground. ZDHC does not have any registered entities in the American continent."

-    ZDHC Governance

"Going beyond within the fashion sector – regionalisation is the key. Having people on the ground is key to engaging brands that are big in, say, India."

-    ZDHC Staff

"Communications, there is now more content, some translations. Through funding, we have been able to translate the website into seven languages. We have a plan to translate documents and tools in seven languages within the grant."

-    ZDHC Staff

Participation of NGOs

"I am not sure how ZDHC interacts with NGOs. I would like to see external input on the board and strong alignment with NGOs. There is an opportunity to build alliances with NGOs. And if they exist, share them."

-    External Stakeholder

"Engagement with NGOs has been slow of late. That voice needs to be there too."

-    Retailers and Brands

"Greenpeace needs to keep watching. It needs to act as an enabler, for accountability, as an activist as well. At the moment there is perhaps not enough push for change from the activists."

-    External Stakeholder

"One stakeholder that should be present in everything we are doing is Greenpeace, why are they not here? Are they a friend or an enemy? I was told that while Greenpeace was relevant, but they had a confronting approach. We disagree. Greenpeace has a group of elite scientists. It can only be to our benefit to learn from them and sharing how it is working out today. There is still not enough feedback from ChemSec, the green chemistry NGOs, Greenpeace, etc."

-    Value Chain Affiliate

Strategy of the Wide Net

"There is always this debate of getting more and more brands on board with ZDHC. We have 30-odd brands, but there are many more brands which are out there. This has always been give-and-take. Do you want to get more brands to get their supply chains on board? Or to get more membership fees? Brands need to follow conditions, apply ZDHC rules. We have a very serious group of brands, working hard to implement the ZDHC rules, they have been very vocal. But the world of brands and supply chains is very large. What we have been able to do is bring the brands with the right mindsets on the board. We have been able to manage to work altogether on the same approach. At the time, many were working on ZDHC but also on their own approach. Work is going well and there is tremendous potential."

- Value Chain Affiliate

"ZDHC should ditch the slowest 20% and move faster."

- External Stakeholder

"I question how many brands and retailers on board is optimal – more is not necessarily better – it is more what is needed to drive the supply chain reform. More brands can complicate things."

- ZDHC Governance

"ZDHC engaged with the industry to develop these standards, and as a result the acceptance is better. The main strengthened side is engaging the industry in the development of standards, engaging with all the people who wanted to collaborate. The industry has also shown willingness to participate. Developing standards is difficult, you need to look at what different countries have, WHO, etc. To pull in these experts, it is something. This is a real strength, getting those right people in the taskforce who really understand the subject, others have not been as successful."

- Value Chain Affiliate

"ZDHC should leave a number of companies behind. The big ones are not the biggest problem, in general. Many of the big ones, they have commitments that supersede what ZDHC is doing. Then they need to backtrack and lower their ambitions to work with ZDHC, which is a shame. ZDHC is working step by step, sorting out one issue and moving to the next. […] In particular with regard to the MRSL list, it is incredibly slow. And less ambitious."

- External Stakeholder

"I want to make sure that there is continuous innovation on better chemicals. The chemical industry thinks that level 3 MRSL is green chemistry, it is not."

- External Stakeholder

"As an outsider, one of the concerns I have is, you have all of these brands that have joined ZDHC, but what do they have to do? What happens if they do not implement the MRSL? What is the threshold for membership? Can you be thrown out of ZDHC? One can join without doing anything. There has got to be a reason for being kicked out. If you join, you need to implement the MRSL. Otherwise you are eroding the ZDHC brand. They are trying to do that using the Brand Leadership Programme, not sure it is the right vehicle. There needs to be some accountability around the requirements if you join the ZDHC family."

- External Stakeholder

"We lost the chance of being aspirational, we are now looking for foundational. I do not know when we will reach aspirational. The winds are blowing against us, but the ZDHC staff has done a good job to move us in

the right direction. […] I want everything to be aspirational. Do not worry about lobbying people. Be aspirational beyond compliance."

- Value Chain Affiliate

"The minimum expectancies are set up by the brands. We cannot do much to move the laggards to the corner."

- ZDHC Staff

"Some of the better brands, they want more scrutiny, they want to show they are doing good. One of the big risks for ZDHC is that better brands leave, because they do not feel recognised. […] If there was a basic standard in order for brands to be members, for instance brands would apply for membership rather than become members any way they want, like Michelin stars. Their performance in their supply chain to me is much more important than using 50 kg of beetroot juice."

- External Stakeholder

"For laggards […] the Leader Programme has an exit scenario. With the Roadmap, if there are no improvements for three years, we will question whether brands should have a seat at the table. The engagement model, particularly the advisory groups, should not be slowed down by laggards."

- ZDHC Staff

"I think there should be criteria as to which task teams you apply to, based on demonstrated expertise, not just interest. We do not need observers! If you are in a task team you need to contribute, if not your participation in task teams should be restricted. There is a task team, we are 17 but only 4 participate. Qualification, contribution should be assessed. If you do not participate in X calls, forget it, you are lost completely."

- External Stakeholder

Appendix XIII. Additional Information – Long-Term Value

Quotes on Environmental Sustainability

Tracking Stakeholder Compliance with Standards

"Brands need KPIs, the conformance pyramid was meant for brands to improve. If brands do not care about the KPIs and reaching them first, it falls flat. If the brands do not translate the conformance pyramid in their own improvement, it remains the lowest bidder that wins. Unless you have the KPIs as a public commitment that they will improve. Improving conformance can be a strong driver, but it currently probably is not. I have not seen public statements."

- External Stakeholder

"How is each company doing in their reduction? They have their wastewater module, with indicators, this is very good – although it could be interpreted in different ways. Would need some toxic waste tracking in the supply chain."

- External Stakeholder

"One of the big risks for ZDHC is that better brands leave, because they do not feel recognised. ZDHC is about zero discharge, and they are still not measuring that really. It needs to happen. The foundation is there, but they need to take to the next level."

- External Stakeholder

"There will need to be a review of standards that are not clear and that are pass/fail. When there is a failure, the mill would have to deal with it. This sort of parent/child relationship between brands and mills is not sustainable. Mills need to demonstrate the efforts they are making."

- External Stakeholder

"I know one brand that makes statistics (how many manufacturers, how many chemical suppliers). I am not sure ZDHC can prove that chemicals management has changed to a significant percentage. They say it happens because they do not find chemicals in the water, that is their crazy crosschecking."

- Certification Body

Compliant Supply Chain Actors Rewarded by the Market

"For chemical suppliers, transactional costs cannot be too high – they need to be justified. There are savings in the system though elimination of double testing. Chemical companies were already paying for certifications prior to ZDHC MRSL. Overall, the burden of participation is a little bit more costly than before and not fully compensated in the market, yet. That is where volume comes in."

- Associate

"The dying industry, they don't see the added value of displaying their products on the Gateway. A study came up last week, brands are not backing their preferences with orders. Not if you are more expensive

than the mill next door. It is an absolute statement of the obvious. That is why we need brave next steps. You have two modes of operations: check factories then buy, or buy and then check. Most brands nowadays do the latter. But once you have placed your order, you have basically approved everything in the supply chain. We need to go back to check then buy. There are certain brands that do a good job. Their argument is that timelines are too tight, but if CEOs were to deny orders that had not been checked, then they would find a way. But that is cost, it is time. You also find some problems that you feel obliged to deal with, and that you would rather not deal with. ZDHC is operating with brands working under the buy then check model, it is a challenge."

- External Stakeholder

"The hardest thing is to get the suppliers input their formulations in the Gateway. It is hard to get everyone to collaborate. They need to see a benefit for themselves. We are making a lot of efforts so there is a return to chemical companies as well, so they can showcase their products, get visibility, get new clients, etc."

- External Stakeholder

Tapping into Formulation Compliance with Existing Regulations

"There are so many new chemical regulations hitting the apparel industry just now, it is challenging to keep up with regulations. If ZDHC can succeed, then all the better. I don't think they are there yet"

- External Stakeholder

"Regulations: there is so many regulations coming. If ZDHC is not on top of that, it is a problem. Maybe they don't want to be, maybe they just want to remain an aspirational sustainability movement. But the brands need to deal with these regulations now."

- External Stakeholder

"The Gateway only shows you the ZDHC MRSL, not other regulations or standards. Is it bluesign certified? Is it OEKOTEX certified? You could have searched per ZDHC MRSL, bluesign certified. If it is just a level on the pyramid, you are limited. If it is Nordic Swan certified, I would like for the Gateway to show. If I need to follow these norms, why would the Gateway not tell me? Otherwise I need to search every formulation twice. ZDHC's big idea is that they are the ring to rule them all. But needs differ among types of stakeholders, regions, etc. ZDHC cannot certify that it is true, but chemical suppliers could say that they also obtained certification X and Y and you could search based on that."

- External Stakeholder

Quotes on Financial Sustainability

"ZDHC is shifting business model from dues to transaction-based fee for service in the supply chain. This seems sensible. The work of ZDHC is going to go on for a long time. It's a matter of continuous improvement."
- -External Stakeholder

"It would be great to be free of any brands – but that would mean operating on a shoestring. Challenge is to earn enough revenue itself without charging too much. Feels ZDHC is moving in the right direction on this. Worry that for the brands financial survival will trump sustainability."
- External Stakeholder

"The financial model is self-sustained, you have a fairly good stream of revenue coming from the gateway, the wastewater, the contributors. They have done a good job creating these revenue streams. More there needs more value for money In the Academy."
- Value Chain Affiliate

"Wise move not to grow too big too fast – couldn't support the weight of a large organisation."
- External Stakeholder

"They are quite efficient, working on so many standards, taking help from the members to develop them. Keep it small, and take help from the industry. Any new standard increases the need for testing, there is higher demand for labs. Not try to increase the testing to no end, only test what needs to be tested. How can ZDHC get something in return – the lab should pay a license fee or something. We should keep the price of tests down, to increase access, because it is expensive."
- Value Chain Affiliate

"The financial model is self-sustained, you have a fairly good stream of revenue coming from the gateway, the wastewater, the contributors. They have done a good job creating these revenue streams. More there needs more value for money In the Academy. Nothing changes until you are trained. We need to be the go-to place for trainings."
- Value Chain Affiliate

"Academy – In response to the comment that it has been left behind, I agree, it is very thin right now. and sees huge opportunity for a reliable ed platform for every type of sustainability programme. ZDHC academy could become that infrastructure - made the case that it is relevant not just to chemicals but to sustainability initiatives at large in the fashion sector (and beyond). "
- External Stakeholder

"ZDHC has funding from Laudes, but very much form the brands which are struggling just now. Cashflow is being watched now, bad time to hire. That is a risk at the moment that the programmes could stall a little bit because there is a pull back of funding in some areas."
- External Stakeholder

"Important to see which parts of the ZDHC ecosystem can be a cash generator – score cards, induction, processing – be careful not to farm too much of this out. What is key is to get more contributors."
- Retailers and Brands

"Balancing act required here. Need to find creative ways to engage contributors (at all levels) without them feeling the financial pinch too much. Volume of transactions is critical to get income."
- ZDHC Governance

Quotes on Scalability

Systems and Processes Designed to Scale

"The ZDHC Gateway -Wastewater Module was developed with the goal of scaling across the industry, and the initial results show that this is indeed the case. The system infrastructure was designed to support both a very high number of users as well as high traffic to the system from the very beginning of the design process. Below are a few examples of how the module was designed and implemented so that it could scale quickly and effectively."

- Wastewater end of project self-evaluation, ZDHC

"ZDHC initiatives are building scale. They involve the chemical industry and stakeholders in programme development, it pays dividends. They try on all levels to find organisational alignment."

- External Stakeholder

Expansion into New Regions and Deeper into the Supply Chain

"Some more regional focus would help, we can go deeper in the different regions, invite more brands that are in the region."

- Value Chain Affiliate

"As the ZDHC programme moves beyond its 2020 commitment, we will continue to clean up the apparel and footwear supply chain by expanding our community and building our local representation in production regions".

- Impact Report

"We talk about the implementation in the grassroot level for industries as large as textile and footwear, we are speaking of a massive capacity. At the moment there are a handful of experts in Italy, India and China. We need to come up with more aggressive and innovative models of capacity building to deliver what we promised in terms of expertise. Our people can go to the textile mills and work with them, to help them develop their capacities."

- ZDHC Governance

"Big brands are in – but need to challenge the smaller and the more local and regional ones. It is a job not yet done."

- ZDHC Staff

Increasing Brand Contributorship

"What is key is to get more contributors. More chemical supplier participation, more brand participation."

- Retailers and Brands

"30 brands is a modest sized club – SAC has over 60. We need to get bigger. It is critical that all brands engage their supply chains. You can have super sustainability focused companies with badly performing supply chains, it is not good enough."

- ZDHC Governance

"Brands involvement has not grown much. It has been a dilemma: ZDHC was apprehensive, knowing that the tools not fit for purpose. But now we have the tools in place, we need to really push brand entry."

- Retailers and Brands

Engaging with Other Sectors

"We need to look collaboratively at all we have already in the work of ZDHC – of those items identified, which could we improve?"

- Certification bodies

"Broadening the remit beyond chemicals, for instance MMCF processing upstream fibres, yes, chemistry is involved, but there are other things to solve first: the Gateway, the MRSL, etc."

- External Stakeholder

"You cannot do the whole work on your own. I am nervous that ZDHC loses sight of this core piece. Brands are asking for a lot of things from ZDHC, ZDHC need to keep on weeding out the demands that do not fit with their game plan."

- Value Chain Affiliate

"To increase the impact, we also need to spread the message to neighbouring supply chains of the textile and leather manufacturing industry. […] We will engage neighbouring supply chains to reduce cross-contamination from other industry segments that share manufacturing facilities."

- Impact Report

"I can see an expansion of scope, and also in other sectors. There are very close sectors, still within retail: household clothes, footwear, etc. I could see it going into the automotive industry – biggest user of PFCs. If you go there, you move a whole new area. Electronics too. What is happening with ZDHC, the platform can work in other sectors, the technologies can be passed on to the bodies in other areas."

- External Stakeholder

"What next – we need to go collaborate with other industries. For example, leather is being used for multiple sectors outside of fashion like the automotive industry."

- ZDHC Staff

Appendix XIV. Terms of Reference

Request for Proposals
Mid-Term Review of the Core Support and Implementation Grant to Stichting ZDHC Foundation

Laudes Foundation[1] seeks an Evaluation Team for undertaking an independent mid-term review of the core support and implementation grant provided to Stichting ZDHC Foundation and funded by Laudes Foundation. Complete proposals must be submitted by 30 June 2020. More details are given below in the terms of reference.

I.   Introduction

Laudes Foundation is an independent foundation and part of the Brenninkmeijer family enterprise. Launched in 2020, we build on the six generations of entrepreneurship and philanthropy and stand next to the COFRA businesses and the family's other private philanthropic activities, including Porticus, Good Energies Foundation and Argidius Foundation. Although independent from them, we learn from their past and present experiences. In particular, Laudes Foundation will advance the industry-changing work of C&A Foundation.

Laudes Foundation is commissioning an independent, mid-term review of the core support grant (EUR 1,757,000) provided to Stichting ZDHC Foundation and to arrive at an objective assessment of the extent to which the core support grant met its intended goals, to document the missed opportunities and provide a focused set of recommendations and lessons that will enhance learning and inform the strategies in the remaining phase of the grant. The grant aligns with the foundation's strategic objective of strengthening platforms and institutions to enable industry-wide change.

The terms of reference present a brief description of the grant; scope; objectives and key questions; mid-term review methodology; stakeholder involvement; roles and responsibilities; mid-term review process; deliverables; audience and dissemination; consultant qualifications and projected level of effort.

The mid-term review is required to be completed and submitted to Laudes Foundation by 30 October 2020.

II.   The Grant

The textile industry is one of the most polluting in the world. Some of the 5,000 chemicals used to process textiles and garments are hazardous, causing serious harm to people and the environment in garment producing countries. ZDHC Foundation (the only industry coalition with the goal of eliminating pollution caused by chemicals) was founded in 2015 and since then undergone intense development and growth. ZDHC has developed requisite collaborations, standards, tools and implementation guidance for industry stakeholders to reduce their harmful chemical inputs. However, it lacked the human capital and financial resources necessary to pursue four specific scaling mechanisms designed to bring these solutions to the industry and world at large. By supporting ZDHC as an industry body to achieve its goals, its potential impact can be increased enabling the industry to respond more quickly to this urgent issue.

With support from Laudes Foundation, ZDHC has developed a robust strategic plan for growth and had identified interconnected activities under its strategic priority resource areas to accelerate progress to the

scale needed for maximum impact. In 2018, Laudes Foundation has provided a four-year core support grant to ZDHC to:

1) Demonstrate the role of enabling chemistry - by building a clear business case to demonstrate the effectiveness of ZDHC go gain greater buy in. This will include exploring chemistry in circular economy and what the role of ZDHC will be;

2) Strengthen organisational capacity - hire new staff members with key expertise in raw material production, marketing of ZDHC tools and industry alignment;

3) Deepen geographical reach and implementation - better serve and engage stakeholders in key production areas, and expand and improve the ZDHC academy; and

4) Drive continuous improvement - develop innovation/pilot platform for manufacturers to scale chemical substitutes (with partners like Fashion for Good and ChemForward) and build industry knowledge and provide brands with data and materials needed for consumer facing communications.

Laudes Foundation is providing approximately EUR1.75 million as core support to ZDHC Foundation. Additional grant related details will be provided to the consultants by ZDHC Foundation and Laudes Foundation.

III.   Scope

The mid-term review should assess the value and performance of the core support grant till date and examine how and why the grant has met or not met intended objectives. The mid- term review must assess what results the grant has enabled ZDHC Foundation to achieve and document emerging lessons and recommendations for the remainder of the grant duration. The mid-term review will also generate lessons learned and recommendations for similar funding opportunities and institutional strengthening grants. It must identify missed opportunities and deepen knowledge and understanding of successes, failures, assumptions and potential for leveraging and building upon institutional strengthening grants for ZDHC Foundation and Laudes Foundation.

IV.   Objectives and Questions

The Mid-term Review Objectives are to:

1. Review the value addition of the core support grant to ZDHC Foundation for organisational effectiveness, till date
   a. Assess the strategy, approach and design implemented by the grant in achieving and / or progress towards outcomes
   b. Assess external and internal factors (in design and implementation) that have contributed to or impeded achievement of outcomes
2. Examine the quality of the design and implementation of the grant, the preconditions, and levers used by the institutional strengthening grants in achieving intended outcomes as well as assess the interim results, potential for sustainability and scalability of the grant, till date
3. Examine the mid-term performance and results of the implementation aspects of the grant
4. Distil actionable and strategic recommendations and lessons for the remaining phase of the grant.

Mid-term Review Questions: The specific evaluation questions will include, but are not limited to the following:

A.   **Alignment, Design and Implementation**

- How appropriate has the grant design been in contributing to the institutional strengthening of ZDHC Foundation and the performance of outcomes towards its objective of *Accelerating and Scaling ZDHC Global Impact[27]* till date?

- How well was the grant aligned with the strategies of C&A Foundation (now Laudes Foundation) and ZDHC Foundation?

- How well was the grant aligned to the organisational needs and challenges of ZDHC Foundation?

- To what extent has the grant engaged with the 'most appropriate and relevant' stakeholders for achieving intended outcomes?

- Were the activities implemented, till date, executed in an efficient manner? Are the targets realistic given the scale of operations? What trade-offs and adjustments, if any, have been made by the grant in order to drive efficiency so far?

- How well has ZDHC's existing skills and experience enable delivery of the outcomes (both for core support and implementation) and have there been any gaps and why?

- Why was core support needed by ZDHC Foundation and has it been the right kind of support, in terms of – duration, scope, funding amount and flexibility?

- Has the grant tracked outputs and outcomes in a credible, systematic manner till date? What mechanisms (formal or informal) have been into practice to capture results, experiences and lessons to inform the institutional strengthening approach and to achieve intended outcomes till date? Has the grant employed good and appropriate communication to promote internal and external collective learning?

B.   **Results**

- What have been the results of the core support till date? What difference has core funding made to ZDHC Foundation? E.g.
  - Capacity to develop guidelines and standards; and to provide trainings through the ZDHC academy
  - Communication and IT capacities
  - Operational and financial capacities
  - Relationships with actors such as brands, retailers etc.

- What have been the results of the grant till date? What is the evidence of the initiative's effectiveness till date, and specifically, with respect to:
  - Demonstrating the role of enabling chemistry through a business case study and documenting a circularity study for new business models
  - Deepening geographical reach and implementation targeted stakeholder management for increasing uptake of chemical management solutions in target areas, ZDHC chemical management offerings available in additional languages
  - Driving continuous improvement in the industry through piloting and scaling innovative chemical substitutions and alternative technologies as well as increased use of consumer facing communications materials aligned with ZDHC approved content

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[27] This is the title of the grant as per the grant agreement and combines both core support and implementation.

- To what extent is the grant on the appropriate trajectory to:
  - spur implementation of creative, imaginative ideas (innovations) to solve industry related challenges on chemical pollutants and
  - for alternative business models promoting an inclusive and regenerative economy?

- Does the grant have the influence (or potential to influence) in contributing towards changing narratives (mental models and assumptions) of brands, retailers, facilities, chemical suppliers, actors (such as Ellen McArthur Foundation, C2C Product Innovation Institute etc.), industry associations, (domestic) brands and retailers, manufacturers, chemical companies, regulatory bodies and ministries on harmful use of chemical inputs within the fashion and footwear industry?

- How effective has the grant been in identifying and prioritising enablers to achieve results till date?

- Is the grant on the correct trajectory to contribute towards wider system shifts and industry transformation in the use of harmful chemicals? Which of these strategies and processes, if not all as a whole, can be replicated? What unintended results (positive or negative) has the grant produced till date and why?

- Has the core funding been used for its initial intentions? Has this changed and if yes, why? How has the COVID-19 crisis impacted ZDHC Foundation and specifically, grant outcomes?

- Has the initiative leveraged or amplified the effects of other grants/initiatives?

- What external and internal factors as well as challenges and risks have influenced the implementation? And why?

- What are the drivers (both positive and negative) that influenced grant implementation till date? What should the grant do to scale and sustain these in the remaining phase?

- What are the main lessons learned from the grant so far?

C. **Long-term value**

- What has been the grant's value in building long term capacities for ZDHC Foundation till date?

- What has been the grant's potential in increasing and promoting environmentally sustainable business models and practices for industry stakeholders to reduce and/or eliminate their harmful chemical inputs?

- Has the grant been able to assure viability both for long-term and for scale so far? What were the missed opportunities?

- What are the main factors that have promoted and/or reduced the grant sustainability and results till date?

- What strategies or approaches adopted by the grant have the potential to produce medium-term and long-term impacts for institutional capacity building and subsequently achieving programmatic results?

V.   Methodology

The mid-term review should employ a mixed methods approach with a primarily qualitative approach complemented by quantitative methods to ensure sufficient data gathering. The mid- term review design will be primarily based on a review of the existing documents and key informant interviews. The methods for assessing the effectiveness of core support grants and grants working on influencing narratives and changing practices (reduction of chemical inputs) are mixed leaning more towards qualitative methods. The qualitative and quantitative data will be used to triangulate evidence and provide critical insight into the

evaluation questions above. It is expected that mid-term review methodological framework will draw on how to measure the institutional strengthening outcomes of the grant that relates to effective performance of the implementation objectives of ZDHC Foundation. Qualitative data will be used to provide critical insight into health and effectiveness of the institutional strengthening grant, how it has contributed to results, and how it has supported the delivery of results or not.

In doing so, the mid-term review will ensure that evidence gathered can be sufficiently triangulated to deliver aggregate qualitative judgments on the basis of a broad range of data; documentary; interviews with staff of ZDHC Foundation, Laudes Foundation and a range of actors.

The mid-term review will follow, but is not restricted to, the below mentioned data collection methods. Attention needs to be paid to triangulating feedback different actors in order to ensure validity. Rigorous qualitative approaches (e.g., content analyses) should be employed to analyse and examine data, causality and contextual influencing factors, where possible.

Portfolio and documentary review will be conducted based on all existing initiative related documents and data held by ZDHC Foundation. The review (alongside initial interviews) will be conducted first.

Semi-structured Interviews will be conducted with informants including:

- Relevant ZDHC Foundation staff
- Laudes Foundation (formerly C&A Foundation) staff
- Various actors such as brands, retailers, facilities, chemical suppliers, actors (such as Ellen McArthur Foundation, C2C Product Innovation Institute, ChemForward, ChemSec, etc.), industry associations, (domestic) brands and retailers, manufacturers, chemical companies, regulatory bodies and ministries in different geographies

Rating system: In addition to this, the evaluation Team will employ the rubrics rating system that rates the grant's mid-term performance. The rating will be developed by the Evaluation Team in consultation with the Effective Philanthropy Team at the foundation.

Sampling: Purposive sampling will be done for identification of key stakeholders for interviews. Stakeholder Involvement is critical to the successful execution of the evaluation. The mid-term review is expected to employ a participatory approach providing for meaningful involvement of ZDHC Foundation.

VI.   Stakeholder Involvement

Stakeholder involvement is critical to the successful execution of the mid-term review. The consultancy is expected to retain independence in coming to judgments about the grant but employ participatory and collaborative approach providing for meaningful involvement of Laudes Foundation and ZDHC Foundation management and staff, and other actors (such as contributors, co-financiers) involved in the grant.

The key stakeholders are:

- Relevant ZDHC Foundation staff both part of management and those involved in the grant
- Key staff at Laudes foundation involved with this initiative

The draft report will be discussed in a meeting and also circulated to relevant ZDHC Foundation and Laudes Foundation staff and management for review and comments prior to finalisation.

VII.   Roles and Responsibilities

- The Evaluation Manager[28] is responsible for:
  - Overall responsibility and accountability for management and delivery of the mid-term review up to and including approval of the final report;
  - Technical guidance for the consultants throughout the implementation of the mid-term review up to and including participation / observation of data collection;
  - Leadership of the mid-term review draft report review process including collating comments and facilitating discussion and management responses.
  - In all of these roles, necessary support will be provided by other members of the Laudes Foundation Effective Philanthropy Team.
  - Facilitation on the mid-term review including access to initiative related data, all documents, and access to stakeholders/actors (internal and external);
  - Reviewing and commenting on drafts of the inception and mid-term review report;
  - Preparing a management response, as and when necessary.

- The Grant Manager at ZDHC Foundation is responsible for:
  - Facilitation and day-to-day assistance to the consultants including access to grant related data, all documents, and access to stakeholders/actors;
  - Reviewing and commenting on drafts of the inception and mid-term review report;
  - Preparing a management response, as and when necessary.

- The evaluation consultants are responsible for:
  - Conducting all necessary qualitative and quantitative assessments and data collection;
  - Day-to-day management of the mid-term review;
  - Regular formal and informal reporting to the Evaluation Manager;
  - Participation in key evaluation related meetings (kick off meeting, inception report meeting and draft findings meeting etc.)
  - Production of deliverables (inception report and mid-term review report) in accordance with the Terms of Reference and contractual arrangements.

The consultants will report to Fabio Almeida, ONE Manager, Laudes Foundation on all issues related to the mid-term review, contracts, fees and expenses, and deliverables and commenting / responses processes. Additional evaluation support will be provided by Lee Alexander Risby, Director of Effective Philanthropy.

VIII.   Mid-term Review Process

The mid-term review will be carried out in conformity with the principles and standards set out in Laudes Foundation minimum requirements and policy for Monitoring and Evaluation.

The consultants will prepare a mid-term review **inception report and work-plan** that will operationalise the Terms of Reference and outline the use of rubrics rating system in the mid- term review. The inception report will be based on initial documentary review and preliminary interviews with different actors.

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[28] The Evaluation Manager is not involved in the management of the initiative or the day to day operations.

The inception report and work-plan will address the following elements: expectations of the mid-term review; roles and responsibilities within the consulting Team; any refinements and elaboration to evaluation questions; methods – qualitative and quantitative and data collection, including possible constraints; outline of the final mid-term review report and an evaluation matrix linking questions – methods – data sources and indicators.

The inception report and work-plan will be approved by the Evaluation Manager and act as an agreement between the consultants and the Laudes Foundation on how the mid-term review is to be conducted.

The consultants will prepare the **draft and final mid-term review reports** that describe the review methodology, findings, recommendations and key lessons.

If significant differences arise regarding the interpretation of evidence between Laudes Foundation and ZDHC Foundation programme management on the external, mid-term review report, an opportunity will be provided to formulate a management response to the findings and recommendations. This will be published with the final report.

The main activities and timetable for this consultancy is set out below:

MID-TERM REVIEW PROCESS	DEADLINE	RESPONSIBILITY
Selection and contracting of consultancy	15 July 2020	Laudes Foundation (ONE Manager)
Inception report preparation	30 July 2020	Consultant Team
Completion of documentary review / interviews and data collection	10 September 2020	Consultant Team
Draft report for comment	5 October 2020	Consultant Team / ONE Manager (facilitator)
Final report	30 October 2020	Consultant Team
Preparation and copy-editing of report	November 2020	Laudes Foundation (Effective Philanthropy Team)
Dissemination of the mid-term review	December 2020 onwards	Laudes Foundation (Effective Philanthropy Team)

IX.   Deliverables

The mid-term review requires the consultant to submit the following deliverables:

- Inception report
- End of Data Collection – initial findings workshop or a virtual call with Laudes Foundation and ZDHC Foundation staff
- Draft mid-term review report
- Findings Meeting (virtual meeting with relevant Laudes Foundation and ZDHC Foundation staff)
- Final mid-term review report, not to exceed 30 pages, with a two page executive summary

X.   Audience and Dissemination

Main audiences for the mid-term review report will be Laudes Foundation and ZDHC Foundation. The final mid-term review report will be published by Laudes Foundation and ZDHC Foundation staff and disseminated through websites and social media.

Learning products including a lessons notes will be developed after the completion of the mid- term review.

XI.   Consultant Requirements and Level of Effort

Applicants may be individual consultant, a group of individual consultants with a designated Team lead, or consulting companies with relevant evaluation expertise. Applicants must have at a minimum the following qualifications:

- Experience in conducting evaluations to a high standard in Europe and globally;
- Substantial experience in conducting evaluations related to use of chemicals in apparel supply chains and institutional strengthening and core support grants;
- Knowledge of apparel supply chain and an understanding of organisational structures;
- Sound knowledge of the use of chemicals in the apparel/footwear supply chain;
- Programmatic / strategic evaluation experience to inform further development of organisational operations and strategies;
- Additional experience is expected in:
  - Methods for evaluating core support;
  - Theory-based evaluation designs;
  - Mixed methods;
- Strong facilitation skills and proven ability to lead participatory processes;
- Fluency in English (spoken and written) is essential; and
- No conflict of interest with Laudes foundation and ZDHC Foundation

The expected level of effort for the evaluation is approximately 30-40 working days. This is an estimate – the level of effort proposed must be aligned with the proposed methodology.

Please submit the following to Mr. Fabio Almeida (f.almeida@laudesfoundation.org)** with a copy to Ms. Savi Mull (**s.mull@laudesfoundation.org**) by 30 June 2020.**

A. Technical Proposal

- A narrative proposal (no more than 5 - 6 pages excluding annexes) and including the following sections:
  - a) Mid-Term Review Methodology: Describe your overall approach and mid-term review methodology including, and not limited to, evaluation questions, mid- term review design and methodology.
  - b) Relevant Experience: Provide details of projects of similar scope, complexity and nature you have worked on previously. Please include any experience with core support related evaluations.

c) Specific Expertise: Describe your level of knowledge and expertise conducting core support and institutional strengthening evaluations/mid-term reviews as well as expertise in knowledge on the apparel supply chain and use of chemicals therein.
d) Key Personnel and Staffing: Describe the key personnel. Include CVs (no more than 2 pages each and attached as annex) of key personnel who would be part of the proposed plan.
e) Timeline: Include a detailed timeline of key activities.
f) Sample reports: Two sample evaluation reports authored by the Team lead (will be treated as confidential and used for purposes of selection)

B. *Financial proposal*

- The financial proposal should include a line-item budget and a budget narrative. The cost estimates used to prepare the budget should be presented in Euros.