

CHEMICAL FOOTPRINT PROJECT

2020 SURVEY RESULTS
FIFTH ANNUAL REPORT



FRONT- RUNNERS IN CHEMICAL FOOTPRINTING





SUMMIT

BEST PRACTICES IN CHEMICALS MANAGEMENT

DISCLOSURE & VERIFICATION

FOOTPRINT MEASUREMENT

CHEMICAL INVENTORY

MANAGEMENT STRATEGY

BASE CAMP REGULATORY COMPLIANCE



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PROFILE:

First Affirmative
Financial Network

As an investment advisor focused on sustainable, responsible, impact investing, First Affirmative Financial Network has engaged with our portfolio companies on the issue of safer chemicals management for over 10 years. We expect corporate policies and practices that support the long-term health of people and planet and contribute to a sustainable economy.

As CEO of FAFN, my education about the dangers presented by toxic chemicals in our environment, and the need to do something about it began long ago. I grew up on a family farm near what was then a heavily polluted Lake Erie. As a child I was admonished to “keep your head out of the water” when swimming to avoid getting sick. As young as I was, I still understood that there was something inherently wrong with using our natural environment as a dumping ground for toxic chemicals, and this lasting memory inspired me to pursue a career that has focused on investing for the common good.

There is high awareness of chemical risk when it comes to highly hazardous chemicals that present immediate threats to human health. However, the more insidious, longer-term risks presented by the vast array of chemicals used in everyday products — plastics, construction materials, pesticides, personal care products, furniture, food packaging, textiles — have yet to be sufficiently addressed by companies and disclosed to investors and the public.

The emergence of COVID-19 has highlighted the significant role that endocrine disrupting chemicals play in compromising healthy immune systems. Populations with compromised immune systems, as well as the primarily black and brown communities that live downstream from chemical emissions and hazardous waste sites, are developing debilitating symptoms and dying at disproportionate rates from COVID-19. The ongoing and staggering human, social,

and financial costs can be addressed in part by accelerating the adoption of effective chemical risk management policies.

First Affirmative Financial Network is a long time signatory to the Chemical Footprint Project because it provides investors with the necessary framework for companies and their investors to measure, manage, and reduce these chemical risks, while enhancing quality of life for people and planet.



CFP “provides investors with the necessary framework for companies and their investors to measure, manage, and reduce ... chemical risks, while enhancing quality of life for people and planet.”



Completing the CFP Survey assists a company in filling in crucial data gaps by providing a robust standard with which to track major components of their chemicals management system — the company’s management strategy, its knowledge of the chemicals in its products and supply chains, its efforts to reduce chemical hazards and encourage use of safer alternatives, and its actions to publicly disclose information on chemical ingredients in its products. It supports proactive rather than reactive chemical risk management and enables benchmarking of performance against peers.

Companies that respond to the CFP Survey are well positioned to meet both the Sustainability Accounting Standards Board reporting standards and the Sustainable Development Goals relevant to hazardous chemicals. The CFP Survey is an excellent tool to better inform its chemicals management strategy and provide meaningful disclosure to investors and the public. Ultimately, First Affirmative would like to see all companies with financial risks associated with reliance on chemicals of high concern set public goals to measure, reduce, and disclose their chemical footprints in the same way many companies are measuring and reducing carbon footprints. Participation in the Chemical Footprint Project as a signatory or as a corporate Responder can help us get there. We hope you will join us.

Holly Testa, Director, Shareowner Engagement and
George Gay, CFP, AIF, Chief Executive Officer

WELCOME

AT A TIME WHEN THE WORLD IS AWASH WITH COVID-19, and cases and deaths are at an all-time high, reducing vulnerabilities to the virus is critical. When the European Union released its new Chemicals Strategy in October 2020, they asked, “Is there a link between chemicals in our environment and the COVID-19 pandemic?” Their answer:

“Exposure of people to hazardous chemicals weakens our resilience and increases our vulnerability, including to communicable diseases. Chemicals can impact the functioning of the human body in different ways. Of particular importance in the context of the COVID-19 pandemic are chemicals that affect our immune and respiratory systems.”¹

The Chemical Footprint Project (CFP) highlights pathways businesses are taking to reduce the use of hazardous chemicals, such as those that may contribute to the severity of COVID-19, including knowing the chemicals in their products and supply chains, measuring their use of hazardous chemicals, and developing and implementing plans to substitute hazardous chemicals with safer alternatives. Through CFP’s annual Survey — see List of 2020 Responders in side bar — companies and their stakeholders evaluate, benchmark, and communicate the development and implementation of corporate-wide systems to substitute hazardous chemicals with safer solutions.

The 2020 Survey highlights are:

- Benchmarks in chemicals management
- Front-runners in chemical footprinting
- Disclosure Leaders in CFP
- New Responders stepping forward

Reducing exposure to chemicals that can increase the severity of COVID-19 should be a priority of business leaders. Additionally, the combination of increasingly stringent regulations, investor demands, and consumer preferences for safer products are creating incentives and opportunities for businesses to identify and use safer alternatives to hazardous chemicals. **The common trajectory of Responders to the CFP 2020 Survey started with actions in the CFP pillars of Management Strategy and Chemical Inventory, and then turned to actions in the Footprint Measurement and Disclosure & Verification pillars.**

THE BENEFITS TO SIGNATORIES & RESPONDERS



LIST OF 2020 RESPONDERS

Responders are brands, retailers, & manufacturers that responded to the 2020 Survey, & include: **Apparel & Textiles:** Standard Textile Co., Inc. **Building Products & Furnishings:** Andersen Windows, Construction Specialties*, Herman Miller, Inc.*, HNI Corporation, Humanscale*, Kohler Co.*, Milliken & Company*, Naturepedic **Household & Personal Products:** Beautycounter, The Clorox Company*, Diversey, Inc., Ecolab Inc., GOJO Industries, Kimberly-Clark Corporation*, Meliora Cleaning Products, Reckitt Benckiser Group plc (RB)*, Seventh Generation **Medical Equipment & Supplies:** Becton Dickinson and Co. (BD), Steris PLC* **Technology:** HP Inc. **Retail:** Ahold Delhaize*, Dollar Tree, Inc.*, Grove Collaborative*, Target Corporation, Walmart* **Toys:** Hasbro, Inc., Radio Flyer **Anonymous:** Five additional companies responded to the Survey, but chose to remain anonymous.

**Reported on partial product portfolios.*

HIGHLIGHTS

FROM THE 5TH ANNUAL CFP SURVEY

2020 HIGHLIGHT

BENCHMARKS IN PROACTIVE CHEMICALS MANAGEMENT

The CFP 2020 Survey results reveal where companies are on their chemicals management journey beyond regulatory compliance. Some are taking their first steps beyond regulatory compliance, while others are further along and demonstrating best practices. CFP enables companies participating in the Survey, hereafter referred to as “Responders,” to benchmark where they are on their journey to safer chemicals relative to best practices and other Responders. Responders use this information internally to assess and improve chemicals management, and externally to communicate progress to stakeholders. Stakeholders use the CFP Survey and data to engage companies in reducing their chemical footprint and capturing market opportunities for safer products.

Participation in the CFP Survey demonstrates corporate leadership in willingness to assess and report to an independent, non-profit organization — Clean Production Action — where their organization stands beyond regulatory compliance in chemicals management. Regulatory compliance is the baseline level of performance in chemicals management and the starting point of the CFP Survey. Best practices in chemicals management go far beyond regulatory compliance.

OVERALL, 33 COMPANIES FROM SEVEN INDUSTRY SECTORS PARTICIPATED IN THE 2020 SURVEY. SEE LIST OF 2020 RESPONDERS ABOVE. SEE NEXT SECTIONS FOR DETAILS ON BEST PRACTICES FROM THE FRONT-RUNNERS, THE LIST OF DISCLOSURE LEADERS, AND COMMON STEPS TAKEN BY NEW RESPONDERS TO THE SURVEY.

FIGURE 1.
CFP 2020 Survey:
Scores of all Responders
by pillar and key benchmarks

KEY BENCHMARKS IN THE 2020 SURVEY:

Front-runners: scored greater than 80% of possible points overall.

Returning Responders (excluding Front-runners): averaged 54% of possible points overall.

Disclosure Leaders: publicly shared their CFP Survey results and score.

New Responders: companies participating for the first time started with actions in the Management Strategy and Chemical Inventory pillars of the CFP Survey.

Each bar in Figure 1 represents the score of one Responder to the 2020 Survey, subdivided by the four pillars of the Survey: Management Strategy, Chemical Inventory, Footprint Measurement, and Disclosure & Verification.

SUMMIT
BEST PRACTICES IN
CHEMICALS MANAGEMENT



Front-runners scored
over 80% on the survey

100%



Disclosure Leaders share
their CFP Survey results and score

80%

DISCLOSURE & VERIFICATION

FOOTPRINT MEASUREMENT

60%

54%

Returning Responders*
average survey score

CHEMICAL INVENTORY

40%

32%

New Responders
average survey score

MANAGEMENT STRATEGY

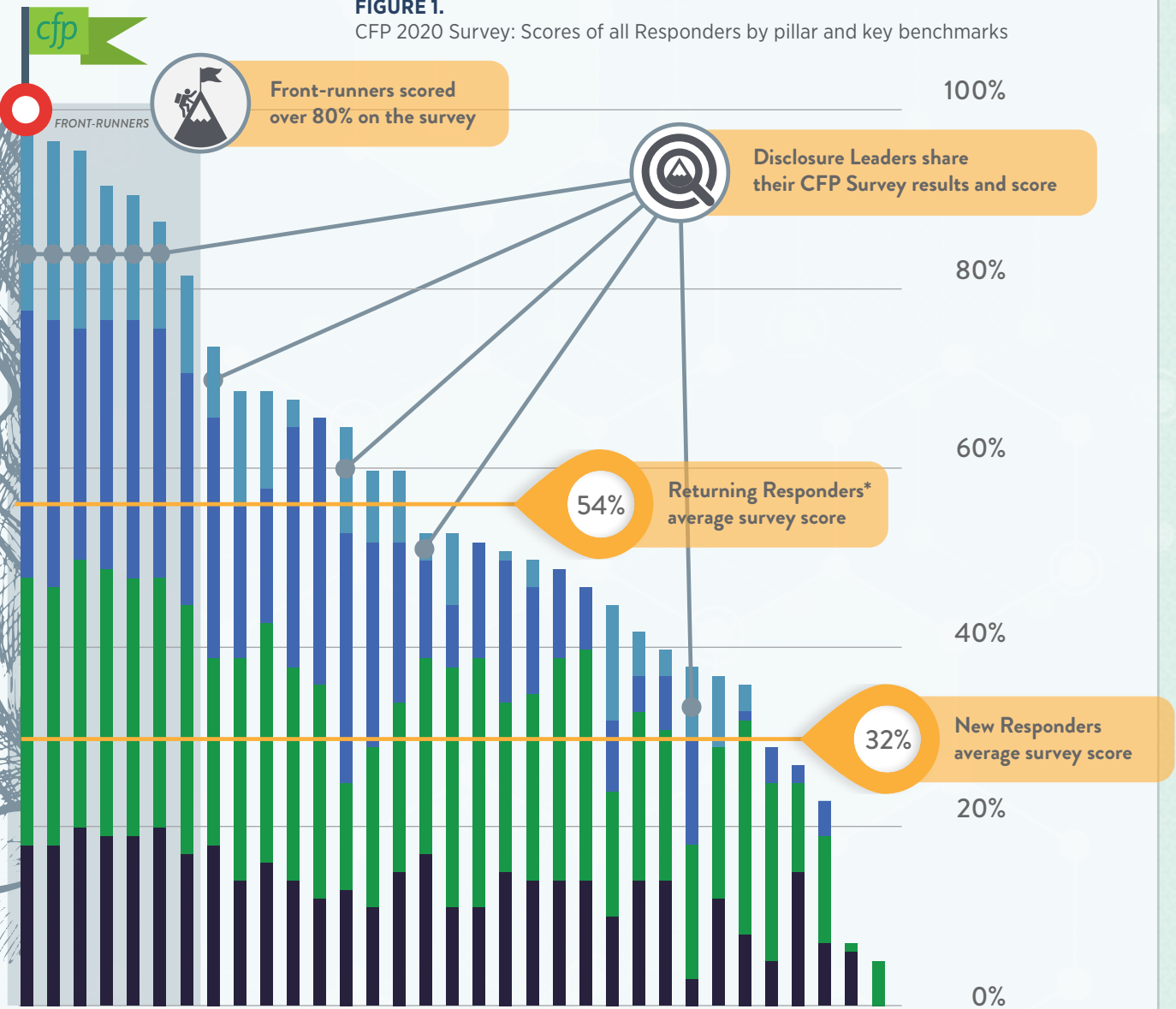
20%

BASE CAMP
REGULATORY COMPLIANCE

0%

FIGURE 1.

CFP 2020 Survey: Scores of all Responders by pillar and key benchmarks



*Returning responders excluding front-runners.

2020 HIGHLIGHT
**FRONT-RUNNERS
 IN CHEMICAL
 FOOTPRINTING**



0-100
 SCORE IN POINTS

80+
 FRONT-RUNNER SCORES

CFP Front-runners are top performers in all aspects of proactive chemicals management. For the first time in five years of the CFP Survey, seven companies scored over 80 percent of possible points. They excelled across all four pillars of the Survey, which encompass 19 questions and 86 possible actions (see Table 1). The Front-runners are a diverse group of businesses. They are small, medium, or large enterprises; publicly traded or privately owned; and from diverse sectors including household and personal products, building products and furnishings, and hardware.

Front-runners demonstrated best practices beyond regulatory compliance. In comparison to all other Responders in the 2020 Survey, **Front-runners uniquely excelled at:**

- Senior management leadership
- Board level engagement
- Restricted substances list (RSL) and manufacturing RSL (MRSL) disclosure
- Chemical footprint measurement
- Safer alternatives to CoHCs
- CFP Survey responses and score disclosure

For details on the best practices of Front-runners see the results sections below.

**FOR THE FIRST TIME
 IN FIVE YEARS OF THE
 CFP SURVEY, SEVEN
 COMPANIES SCORED
 OVER 80 PERCENT OF
 POSSIBLE POINTS.**



TABLE 1.
 CFP 2020 Survey: Question Topics by Pillar (points per question)

MANAGEMENT STRATEGY	CHEMICAL INVENTORY	FOOTPRINT MEASUREMENT	DISCLOSURE & VERIFICATION
20 points	30 points	30 points	20 points
4 questions	6 questions	5 questions	4 questions
26 potential actions	23 potential actions	26 potential actions	11 potential actions

2020 HIGHLIGHT

DISCLOSURE LEADERS SHARE THEIR CFP RESPONSES & SCORES

Investors, large-scale purchasers, individual customers, and non-governmental organizations (NGOs) increasingly place more value on companies that publicly disclose their journey to safer chemicals. For example, Vizient — a health care group purchasing organization with over \$100 billion in annual contracts — reports to its members on whether suppliers participate in the CFP Survey, including disclosure of responses and scores. This information informs the purchasing decisions of Vizient members.

CFP Disclosure Leaders agreed to publicly share their 2020 Survey responses and score on the CFP website at <https://www.chemicalfootprint.org/results/disclosure-leaders>. This is a huge step for companies to take because it requires senior management support to share with stakeholders where the company is at on their chemical footprint journey. As consistently revealed in CFP Survey results over the years, companies participating in the CFP Survey do more on chemicals management than they reveal publicly. Given stakeholder interest in knowing what these policies, programs, and procedures are, CFP highlights companies that are willing to be public on their journey as Disclosure Leaders.

By publicly disclosing CFP responses and score, senior management demonstrated their willingness to engage with stakeholders on the measures they are taking to know and reduce their chemical footprint. See results section on “Disclosing to Stakeholders” for more details on disclosure in the CFP Survey.



READ THE RESULTS: for a list of CFP Responders over the years, and what they publicly disclosed, visit [chemicalfootprint.org](https://www.chemicalfootprint.org).

2020 HIGHLIGHT
NEW RESPONDERS STEP FORWARD



THE RETAILER'S GUIDE TO SAFER CHEMICALS & MATERIALS is a practical and user-friendly resource for retailers beginning the journey to safer chemicals in products. Built from 15 years of work with business and NGO leaders, it includes steps and best practices taken by retailers to reduce their chemical footprint, and aligns with the CFP Survey.




We encourage retailers to check out the Guide to learn how their peers approach chemicals management beyond regulatory compliance. The Guide is freely available at: <https://www.chemicalfootprint.org/resources/entry/the-retailers-guide-to-safer-chemicals-and-materials>.

Nine New Responders joined the CFP Survey for the first time in 2020. They entered into the CFP at different stages in their journey. Some were taking first steps while others were further along in proactive chemicals management.

The most popular steps taken by New Responders were in **Management Strategy and Chemical Inventory**. Their actions indicate how organizations begin the process of moving beyond regulations. Table 2 details actions taken by at least 67 percent of the New Responders. Overall, the 2020 Survey data indicate that companies move beyond compliance by integrating chemicals of high concern (CoHCs) and safer alternatives into policies and strategies, creating restricted substances lists (RSLs), working with suppliers to implement the RSL, assessing the hazards of chemicals in their products, and delineating roles and responsibilities for chemicals management.

“NINE NEW RESPONDERS JOINED THE CFP SURVEY FOR THE FIRST TIME IN 2020.”

TABLE 2. **Most popular actions taken by New Responders to the CFP 2020 Survey**

 MANAGEMENT STRATEGY	
Chemicals policy includes reducing chemicals of high concern (CoHCs) in products & supply chains; and preference for safer alternatives in products	M 1
Business strategy includes screening for CoHCs in products; and having list of preferred safer chemicals/materials	M 2
External engagements that support the reduction of chemicals based on their inherent hazards and disclosure of chemicals in products	M 3
Accountability actions include chemicals management responsibilities in job descriptions, and senior management responsible for meeting chemicals policy goals	M 4
 CHEMICAL INVENTORY	
Restricted Substances List (RSL): has a list of chemicals of concern	I 1
Compliance with RSL: trains suppliers about how to comply with RSL/chemicals of concern list	I 2
Data collection: collects chemical ingredient information from suppliers beyond regulatory requirements	I 3
Chemical ingredient data management: has internal point of contact for suppliers concerning chemical information requirements	I 5
Supplier conformance: has an audit program to verify supplier data	I 6
 FOOTPRINT MEASUREMENT	
Hazard assessment: uses a system or tool to evaluate chemical hazards	F 4

HUMAN HEALTH IMPACT

HAZARDOUS CHEMICALS & COVID-19

The urgency for companies to reduce their chemical footprint ahead of regulations continues to rise as scientists raise red flags over the role of industrial chemicals in exacerbating chronic health conditions associated with increased hospitalizations and deaths from COVID-19. Linda Birnbaum (Former Director of the National Institute of Environmental Health Sciences and National Toxicology Program), Jerrold Heindel (retired Program Administrator from the National Institute of Environmental Health Sciences), and other scientists are connecting the dots between exposure to endocrine disrupting chemicals (EDCs), elevated rates of chronic diseases such as diabetes and obesity, and the association of these diseases with higher rates of COVID-19 hospitalizations and deaths in the U.S.^{2,3,4}

Studies documenting adverse health effects associated with EDCs are on the rise. A 2020 review of hundreds of studies on EDCs published in The Lancet Diabetes & Endocrinology journal highlighted the growing evidence of adverse effects associated with exposure to EDCs — including per- and polyfluoroalkyl substances (PFAS), phthalates, bisphenols, organophosphate pesticides, and polybrominated flame retardants. Such adverse effects include: obesity, diabetes, cardiovascular disease, IQ loss and intellectual disability, infertility, reduced semen quality, and cancer.⁵ In addition, disease rates for diabetes, obesity, heart disease, immune system diseases/dysfunction, and respiratory diseases are all on the rise in the United States.⁶

Many of the diseases associated with exposure to EDCs are among the underlying health conditions associated with higher rates of hospitalizations and deaths from COVID-19. According to the U.S. Centers for Disease Control (CDC), COVID-19 “hospitalizations were six times higher and deaths 12 times higher among those with reported underlying conditions (including cardiovascular disease, chronic lung disease, diabetes, kidney disease, and neurodevelopmental disabilities) compared with those with none reported.”⁷

A striking racial divide exists in vulnerability to COVID-19. Black and brown Americans are 1.4–1.8 times more likely to contract the virus; 3.7–4.1 times more likely to be hospitalized with COVID-19; and 2.6–2.8 times more likely to die from the virus than white Americans.⁸ Structural racism, and social and environmental risk factors are driving the differences in outcomes between races. Exposure to hazardous chemicals is likely a contributing factor to these greater vulnerabilities.⁹ Black Americans are 75 percent more likely than others to live near facilities producing hazardous waste,¹⁰ where they are exposed to higher levels of hazardous air pollutants (HAPs), which in turn are associated with higher COVID-19 mortality rates.¹¹ Additionally, black women may be exposed to higher levels of hazardous chemicals in hair products, including EDCs and asthmagens.¹² This combination of factors means Black Americans are uniquely exposed and vulnerable to COVID-19. As Heindel and Birnbaum conclude, “COVID-19 is bringing into sharp focus the need to prevent this widespread exposure” to EDCs and other hazardous chemicals.¹³

**“COVID-19
IS BRINGING
INTO SHARP
FOCUS THE
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WIDESPREAD
EXPOSURE’
TO EDCs
AND OTHER
HAZARDOUS
CHEMICALS”**

JERROLD HEINDEL & LINDA BIRNBAUM

CFP SIGNATORIES

Investors, health care organizations, NGOs, governments, and retailers increasingly want to know where companies are on their chemicals management journey. Signatories encourage companies in their sphere of influence to participate in the CFP Survey and provide feedback to Clean Production Action on how to improve the Survey.

Investor

Adrian Dominican Sisters
 Advocate Health Care
 Anne Arundel Medical Group
 Arjuna Capital
 As You Sow Foundation
 Athens Impact Socially Responsible Investments
 Australian Ethical Investment
 Aviva Investors
 Bank J. Safra Sarasin Ltd.
 Boston Common Asset Management
 Calvert Research & Management
 Carnegie Investment Counsel
 Christopher Reynolds Foundation
 Clean Yield Asset Management
 Daughters of Charity, Province of St. Louise
 Domini Impact Investments
 Dominican Sisters of Hope
 Everence and the Praxis Mutual Funds
 Figure 8 Investment Strategies
 First Affirmative Financial Network
 Green Century Capital Management

Harrington Investments
 Impax Asset Management
 Investor Voice
 JLens Investor Network
 Legal & General Investment Management
 Maryknoll Sisters
 Mercy Health
 Mercy Investment Services
 Mind the Store Campaign
 Miller/Howard Investments
 Natural Investments
 Newground Social Investment
 NorthStar Asset Management
 Northwest Coalition for Responsible Investment
 Parnassus Investments
 Pax World Funds
 Rhode Island Treasury
 Signity Financial
 Sisters of St. Francis of Philadelphia
 Sonen Capital
 The Sustainability Group of Loring, Wolcott and Coolidge

Trillium Asset Management
 Ursuline Sisters of Tildonk
 Walden Asset Management
 WHEB Asset Management
 Zevin Asset Management

Health Care, Retail, & NGO

American Sustainable Business Council (ASBC)
 Blue Cross Blue Shield of Massachusetts
 ChemSec
 Credo Beauty
 CVS Health
 Dignity Health
 Dollar Tree
 Edward-Elmhurst Healthcare
 Environmental Defense Fund
 Fairview Health Services
 Geisinger Health System
 Hackensack Meridian Health
 Inova Health Systems
 Interfaith Center on Corporate Responsibility (ICCR)

Investor Environmental Health Network
 Kaiser Permanente
 Partners Healthcare
 Premier, Inc.
 Rite Aid
 SAHTECH
 Safer Chemicals, Healthy Families
 San Francisco Department of Environment
 St. Joseph Health
 Staples
 Target Corporation
 The Rose Foundation for Communities and the Environment
 Trinity Health
 University of Cantabria
 University Hospitals
 Vizient, Inc.
 Walmart
 Whole Foods Markets, Inc.
 Zero Discharge of Hazardous Chemicals (ZDHC)

INVESTOR SIGNATORIES represent over **\$2 TRILLION** in assets under management and **HEALTH CARE & RETAIL SIGNATORIES** represent over **\$800 BILLION** in purchasing power.

CHEMICAL FOOTPRINT

MEASURING CHEMICALS OF HIGH CONCERN (CoHCs)

DEFINITIONS...

Chemical footprint: total mass of chemicals of high concern (CoHCs) used by an event, organization, service, building, or product.

Chemical footprint of an organization: total mass of chemicals of high concern (CoHCs) in products sold by a company; used in its manufacturing operations, facilities, and by its suppliers; and contained in packaging.

Chemical of High Concern (CoHC): A carcinogen, mutagen, or developmental/reproductive toxicant; persistent, bioaccumulative, and toxic substance (PBT); very persistent and very bioaccumulative (vPvB); or any other chemical for which there is scientific evidence of probable serious effects to human health or the environment that give rise to an equivalent level of concern — such as endocrine disruption or neurotoxicity — or a chemical whose breakdown products result in a CoHC that meets any of the above criteria.

Source for all definitions: <https://www.chemicalfootprint.org/learn/measuring-a-chemical-footprint>.

A CARBON DIOXIDE EQUIVALENT FOR CHEMICAL TOXICITY

What is a carbon footprint? Carbon Footprint is defined as: “total greenhouse gas (GHG) emissions caused by an individual, event, organization, service, or product, expressed as a carbon dioxide equivalent.”¹⁴ To quantify and compare climate change impacts, the global warming potential of different greenhouse gases (GHGs) can be converted to carbon dioxide equivalents, thereby enabling emissions to be summed up into a single metric.¹⁵

What is a chemical footprint? Chemical Footprint is defined by CFP as: total mass of chemicals of high concern (CoHCs) used by an event, organization, service, building, or product. The field of environmental health¹⁶ lacks a similar unifying metric of a carbon dioxide equivalent due to the complexity of chemical toxicity, which encompasses a wide range of health impacts such as carcinogenicity, reproductive or developmental toxicity, endocrine disruption, acute toxicity, and neurotoxicity. CFP addresses the complexity of toxicity by defining and specifying “chemicals of high concern” (CoHCs).

CoHCs enable the measurement and quantification of a chemical footprint. CFP’s definition of CoHCs aligns with the European Union’s definition for REACH Substances of Very High Concern (SVHCs)¹⁷ and GreenScreen® for Safer Chemicals criteria for Benchmark-1, Chemicals of High Concern.¹⁸

CFP’s CoHCs Reference List¹⁹ specifies over 2,200 chemicals and chemical classes that meet the CFP definition of CoHCs. Built from GreenScreen® List Translator, the CoHC Reference List is the comprehensive list of chemicals companies participating in CFP use to measure their chemical footprint.²⁰ List Translator identifies hazardous chemicals on the basis of over 40 authoritative bodies including the European Union’s REACH regulation, International Agency for Research on Cancer (IARC), U.S. National Institutes of Health, and California Proposition 65.²¹ **CFP seeks to replace the over 2,200 CoHCs classified by authoritative bodies as harmful to human health and the environment with safer alternatives.**

AUTHORITATIVE LISTS

GREENSCREEN BENCHMARK-1 CRITERIA

CFP CoHC REFERENCE LIST



INVESTORS WANT TO KNOW CFP RESULTS



Are businesses capturing market opportunities for safer products, or are they waiting for regulations to force them to eliminate CoHCs? Sustainability investors,²² including the CFP Signatory Investors listed above, want to know where businesses stand in managing the financial risks of hazardous chemicals in their products and supply chains. The CFP Survey enables companies to do just that, assess and communicate to stakeholders where they stand on their chemicals management journey.

The CFP Survey creates critical and quantifiable corporate data for the chemical safety performance indicators in Sustainability Accounting Standards Board (SASB) standards, which address the disclosure of sustainability issues that are financially material to companies. Many of the world's largest money managers — including BlackRock, Vanguard, State Street Global Advisors, and Fidelity Investments — want companies to report to SASB's standards. The seven SASB standards in Table 3 have all identified hazardous chemicals as financially material issues.

Regulatory and reputational risks, along with growing consumer pressures dominate SASB's materiality issues for chemicals in products. At the most financially impactful, the SASB standards for Apparel, Accessories & Footwear and Toys & Sporting Goods emphasize that the failure to manage hazardous chemicals in products may “impact a company's social license to operate.”

The SASB standard for the Building Products & Furnishing sector highlighted that companies in this sector are “exposed to potentially significant regulatory and reputational risk as a result of the use of substances of concern.” Therefore, those Building Products & Furnishing companies that “effectively manage harmful chemicals

in their products may enjoy a competitive advantage over the long term through higher demand, reduced regulatory risk, and improved brand reputation.” SASB's summary of why the management of chemicals in products is a material issue for the Building Products & Furnishings sector is relevant to all the sectors listed in Table 3.

Table 3 includes SASB standards that identify hazardous chemicals as material issues, and details the supporting SASB accounting metrics and CFP Survey questions relevant to each metric. Overall, the CFP Survey supports investor engagement with companies by:

- Defining a holistic chemicals management framework for assessing where companies stand on the journey beyond regulatory compliance to best practices.
- Creating a quantitative metric, chemical footprint, of the use of hazardous chemicals.
- Providing comparative benchmarks of performance on the journey to eliminating CoHCs.
- Elevating the importance of corporate disclosure of chemicals management policies, procedures, and practices.

Consumer-facing companies face the highest levels of risk and liabilities with their continued use of CoHCs. Investors, their customers, and NGOs want to know, where companies stand on their chemical footprint journey.

“COMPANIES THAT ‘EFFECTIVELY MANAGE HARMFUL CHEMICALS IN THEIR PRODUCTS MAY ENJOY A COMPETITIVE ADVANTAGE OVER THE LONG TERM THROUGH HIGHER DEMAND, REDUCED REGULATORY RISK, AND IMPROVED BRAND REPUTATION.’” — SASB

TABLE 3.
CFP Survey Questions that inform SASB accounting metrics on chemicals in products

Sustainability Accounting Standards Board (SASB)			Chemical Footprint Project (CFP) Survey questions relevant to SASB Standards
Standard *	Sustainability Topic	Accounting Metric	
APPAREL, ACCESSORIES, & FOOTWEAR	Management of chemicals in products	Discussion of processes to maintain compliance with restricted substances regulations	Questions: I 1 , I 2 , and I 3
		Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Questions in the Management Strategy , Chemical Inventory , and Footprint Measurement pillars
BUILDING PRODUCTS & FURNISHINGS	Management of chemicals in products	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Questions in the Management Strategy , Chemical Inventory , and Footprint Measurement pillars
		Percentage of eligible products meeting volatile organic compound (VOC) emissions and content standards	CFP does not explicitly ask questions re VOCs, but they would be captured under RSLs in I 1 , I 2 , and I 3
HARDWARE (INCLUDES ELECTRONICS)	Product lifecycle management	Percentage of products by revenue that contain IEC 62474 declarable substances	Questions: I 3 , I 4 , F 2 **
		Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Questions: M 1 , M 3 , I 1 , I 3 , I 5 , F 1 , and F 4
HOUSEHOLD & PERSONAL PRODUCTS	Product environmental, health, & safety performance	Revenue from products that contain REACH substances of very high concern (SVHC)	Questions: I 3 , I 4 , F 2 **
		Revenue from products that contain substances on the California DTSC Candidate Chemicals List	Questions: I 3 , I 4 , F 2 **
		Discussion of process to identify and manage emerging materials and chemicals of concern	Questions: I 1 , I 2 , I 3 , I 4 , I 5 , I 6 , F 1 , F 2 , F 3 , and F 4
		Revenue from products designed with green chemistry principles	Questions: M 2 , F 2 , F 3 , F 5 **
MEDICAL EQUIPMENT & SUPPLIES	Product design & lifecycle management	Discussion of process to assess and manage environmental and human health considerations associated with chemicals in products, and meet demand for sustainable products	Questions in the Management Strategy , Chemical Inventory , and Footprint Measurement pillars
MULTILINE AND SPECIALTY RETAILERS & DISTRIBUTORS	Product sourcing, packaging & marketing	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Questions in the Management Strategy , Chemical Inventory , and Footprint Measurement pillars
TOYS & SPORTING GOODS	Chemicals & safety hazards of products	Number of recalls and units recalled	Not applicable: CFP Survey does not ask questions concerning regulatory compliance, fines, or legal actions
		Number of Letters of Advice received	
		Total amount of monetary losses as a result of legal proceedings associated with product safety	
		Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Questions in the Management Strategy , Chemical Inventory , and Footprint Measurement pillars

*All SASB standards can be downloaded at: <https://www.sasb.org/standards/download/>.

**The CFP Survey does not ask about products by revenue. However, indicated questions define steps necessary for identifying and quantifying products containing chemicals of high concern or green chemicals.

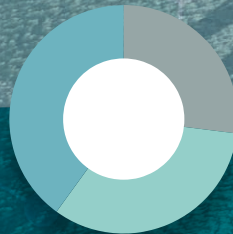


2020 CFP SURVEY RESPONDERS

SURVEY RESPONDERS BY THE NUMBERS

33

COMPANIES
IN SURVEY



COMPANY
SIZE

- SMALL (REVENUE LESS THAN \$0.5 BILLION): 27%
- MEDIUM (REVENUE \$0.5 BILLION-\$50 BILLION): 33%
- LARGE (REVENUE GREATER THAN \$50 BILLION): 39%



COMPANY
OWNERSHIP

- PRIVATE OWNERSHIP: 48%
- PUBLICLY TRADED: 52%

7

SECTORS

- APPAREL & TEXTILES
- BUILDING PRODUCTS & FURNISHINGS
- HARDWARE (ELECTRONICS)
- HOUSEHOLD & PERSONAL PRODUCTS
- MEDICAL EQUIPMENT & SUPPLIES
- RETAIL
- TOYS



SURVEY EXPERIENCE

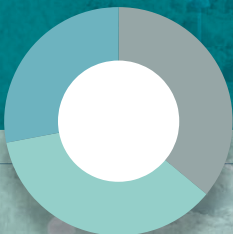
FRONT-RUNNERS (21%):
returning responders that scored greater than or equal to 80 percent of possible points in the Survey

RETURNING RESPONDERS* (52%):
participants in more than one CFP Survey that scored less than 80 percent of possible points in 2020

NEW RESPONDERS (27%):
first-time participants in the Survey

COMPANIES
REPORTING ON...

- ARTICLES: 36%
- FORMULATED PRODUCTS: 36%
- BOTH FORMULATED PRODUCTS AND ARTICLES: 27%



COMPANIES
REPORTING ON...

- ENTIRE PRODUCT PORTFOLIO: 45%
- PARTIAL PRODUCT PORTFOLIO: 55%



77%
COMPANIES WITH
MANUFACTURING

CFP 2020 SURVEY RESULTS

Thirty three companies participated in the CFP 2020 Survey. They hailed from seven industry sectors and ranged in size from small privately owned companies to large publicly traded multinational corporations.

For a snapshot of the types of companies in the 2020 Survey see “Survey Responders by the Numbers” (page 14) and for the names of the companies see “List of 2020 Responders” on page 3.

The CFP Survey, through its questions and response options, creates a holistic chemicals management framework for companies to implement. Enabling businesses to assess and share the initial steps they take beyond regulatory compliance to how they are implementing best practices in chemicals management. Table 4 lists the 19 question topics by each of the four pillars of the Survey: Management Strategy, Chemical Inventory, Footprint Measurement, and Disclosure & Verification.

The 2020 Survey results below feature:

UNFOLDING THE JOURNEY TO SAFER CHEMICALS

FRONT-RUNNERS LEADING IN ACCOUNTABILITY AND SAFER ALTERNATIVES

DISCLOSING THE JOURNEY TO STAKEHOLDERS

REDUCING CoHCs IN MANUFACTURING & PACKAGING

MEASURING PROGRESS TO ZERO CoHCs

THE CFP SURVEY, THROUGH ITS QUESTIONS AND RESPONSE OPTIONS, CREATES A HOLISTIC CHEMICALS MANAGEMENT FRAMEWORK FOR COMPANIES TO IMPLEMENT.

TABLE 4.
CFP 2020 Survey: Question Topics by Pillar (points per question)

MANAGEMENT STRATEGY 20 points			CHEMICAL INVENTORY 30 points			FOOTPRINT MEASUREMENT 30 points			DISCLOSURE & VERIFICATION 20 points		
#	Topic	Points	#	Topic	Points	#	Topic	Points	#	Topic	Points
M 1	Chemicals policy	8	I 1	Restricted Substances List (RSL) / Manufacturing RSL	5	F 1	Chemicals of High Concern (CoHCs) reduction goal	5	D 1	Chemical ingredients	8
M 2	Business strategy	4	I 2	RSL/MRSL Compliance	5	F 2	Footprint measurement	8	D 2	CFP responses	3
M 3	External engagement	4	I 3	Data collection	5	F 3	Footprint change	8	D 3	CFP score	5
M 4	Accountability	4	I 4	Full chemical ingredient information	5	F 4	Hazard assessment	3	D 4	Verification	4
			I 5	Data management	5	F 5	Safer alternatives	6			
			I 6	Supplier conformance	5						

2020 RESULTS

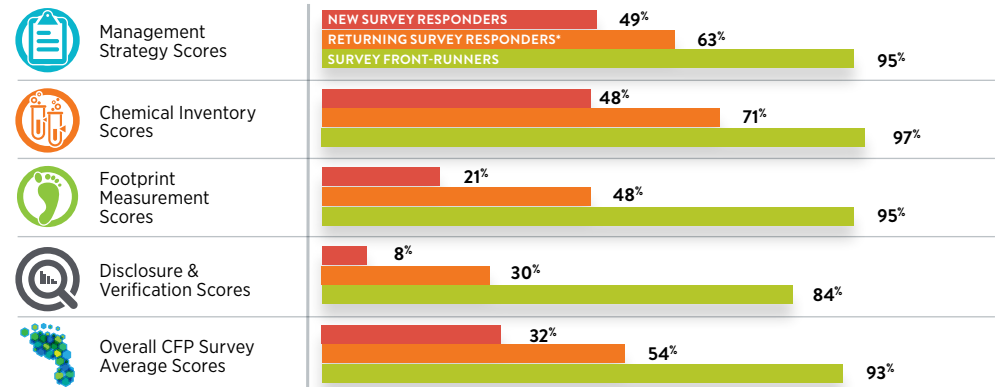
UNFOLDING THE JOURNEY TO SAFER CHEMICALS

Front-runners in the 2020 Survey demonstrated best practices in chemicals management across the four CFP pillars. **Returning Responders** (excluding Front-runners) showed a solid foundation in Management Strategy and Chemical Inventory, and initial actions in Footprint Measurement and Disclosure & Verification. **New Responders**, which included companies that just became familiar with the Survey in 2020 and are just beginning their work beyond regulatory compliance, started with Management Strategy and Chemical Inventory. Figure 2 details how these three categories of Responders scored for each of the four pillars of the CFP Survey as well as for all four pillars combined (i.e., the total score for the Survey). **Figure 2 reveals the common trajectory companies take beyond regulatory compliance, start with Management Strategy and Chemical Inventory (which includes RSLs), then turn to Footprint Measurement and Disclosure & Verification.**

Figure 3 graphs the percent of possible points Front-runners, Returning Responders excluding Front-runners, and New Responders scored for each question in the Survey. Clearly strong in all aspects of the Survey, **Front-runners** had the greatest opportunities for improvement in: chemicals policy (M1), chemical ingredient data (I4), CoHC reduction goal (F1), chemical ingredient disclosure (D1), and CFP response verification (D4). The greatest strengths of Returning Responders (excluding Front-runners) were in: business strategy (M2), external engagement (M3), RSLs (I1), data collection (I3), chemical ingredient data (I4), supplier conformance (I5), and hazard assessment (F4). For details on the strengths of New Responders see the “New Responders Step Forward” section above.

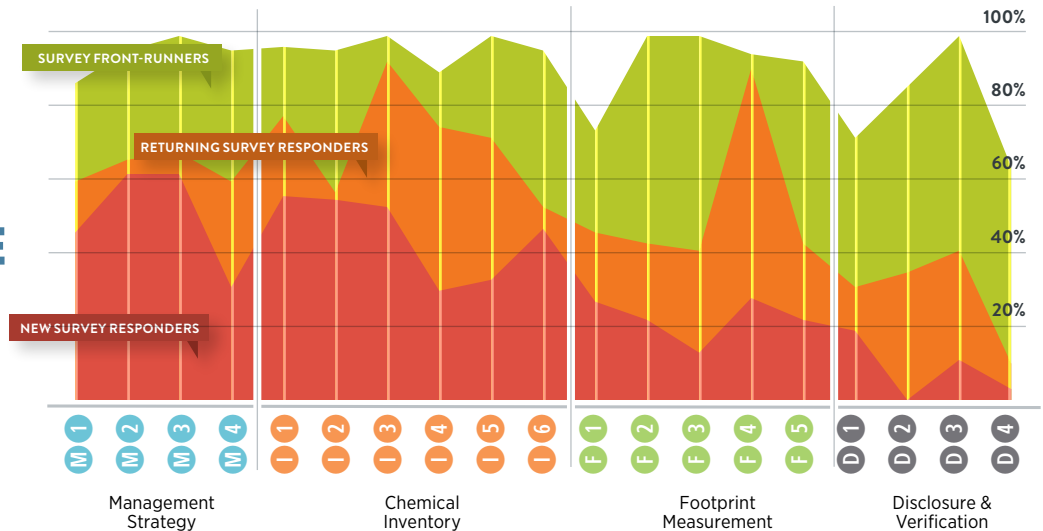
“THE COMMON TRAJECTORY COMPANIES TAKE BEYOND REGULATORY COMPLIANCE STARTS WITH MANAGEMENT STRATEGY AND CHEMICAL INVENTORY (WHICH INCLUDES RSLs), THEN TURNS TO FOOTPRINT MEASUREMENT AND DISCLOSURE & VERIFICATION.”

FIGURE 2. CFP 2020 Survey: New Responders, Returning Responders, and Front-runners average scores for each pillar and all four pillars combined (percent of possible points scored)



*Returning Responders excluding Front-runners

FIGURE 3. CFP 2020 Survey: New Responders, Returning Responders, and Front-runners average scores for each question in the Survey (percent of possible points scored)



Walmart's Sustainable Chemistry Commitment

Walmart's Sustainable Chemistry Commitment encourages suppliers to incorporate Sustainable Chemistry principles into the development of their products that we source and sell. Walmart is both a Signatory and a Responder to the Chemical Footprint Project, becoming the first retailer to set a chemical footprint reduction goal and report progress through the 2017 CFP Survey. Participation in the Chemical Footprint Project helps to publicly communicate our company's commitment to and progress towards sustainable chemistry.

Increasing chemical ingredient transparency

Since 2013, Walmart has encouraged full ingredient transparency. Toward that end, Walmart encourages all suppliers to provide full online public ingredient disclosure for formulated consumable items sold at Walmart U.S. and Sam's Club U.S. stores. Consumables include products like household cleaners, cosmetics and skincare items, and infant products, among others. Walmart encourages suppliers to disclose ingredients online in a manner that is easily accessible from the supplier's website and can be displayed at the product level.

Measuring our chemical footprint

As part of its commitment, in 2017, Walmart became the first U.S. retailer to announce a time-bound chemical reduction goal: "by 2022, we aim to reduce our footprint of "priority chemicals" in formulated consumables by 10%" compared to our 2017 baseline of 215.9 million pounds. In 2018, there were more than 125,000 formulated consumable items in scope sold by Walmart stores and Sam's Clubs in the U.S. in the following categories: personal care, beauty, baby, pet, and household cleaning products.

To track and disclose progress toward its reduction goals, Walmart asks suppliers to share their formulations for each in-scope Universal Product Code (UPC) with UL WERCSmart. In 2018, suppliers provided product formulations to UL WERCSmart for 85% of in-scope UPCs; 66% of total in-scope UPCs contained priority chemicals. UL WERCSmart aggregates the information and calculates Walmart's chemical footprint.

In 2018, based on supplier reports collected through UL WERCSmart, Walmart's priority chemical footprint (weight in pounds) increased by 1% over 2017, while the weight of priority chemicals as a proportion of total product formulation weight declined by five basis points.

Why we do this work

Walmart's President and Chief Executive Officer, Doug McMillon, said it best: "It's time for businesses to take the lead working together and with government and NGOs on serious issues like workforce opportunity, racial equity, climate, and sustainable, responsible supply chains. Consumers are keeping score. They no longer look the other way, and we are committed to do right by our communities. Together, we have an opportunity to shape the future at a pivotal moment. And the biggest outcome for thinking and behaving this way is that it results in a better performing business that benefits all of our stakeholders."



Walmart encourages all suppliers to provide full online public ingredient disclosure for formulated consumable items sold at Walmart U.S. and Sam's Club U.S. stores."



2020 RESULTS

FRONT-RUNNERS LEADING IN ACCOUNTABILITY & SAFER ALTERNATIVES

The “Front-runners in Chemical Footprinting” section above highlighted actions overwhelmingly associated with the highest scorers in the 2020 Survey. Here and in the next sections we delve into the details of actions taken by Front-runners.

Senior management accountability & board level engagement

Front-runners were far more likely than all other Responders to have accountability at the highest levels of the company. As depicted in Figure 5, Front-runners were much more likely to have:

- **Financial incentives for senior management** to meet corporate sustainability goals, including reducing the use of CoHCs (question M4 response option “c”); and
- **Board level engagement in chemicals policy implementation** (question M4 response option “d”).

Senior management accountability and board level engagement are critical to successful corporate-wide chemicals management, especially in the setting of policies and goals, making commitments to identify CoHCs, and replacing CoHCs with safer alternatives. Sustained progress over time in reducing chemical footprints in the face of competing corporate demands requires support at the highest levels of the business.

Safer alternatives to CoHCs

By proactively and systematically seeking safer alternatives to replace CoHCs, companies lessen the risks of a “regrettable substitute” — an alternative chemical that eventually is found to be of equal or greater concern to human health or the environment as the CoHC it replaced. Front-runners explicitly incorporated the use of safer alternatives into their hazard reduction strategies by:

- Including a preference for safer alternatives in their chemicals policy (M1);
- Integrating the criteria for safer alternatives into their business practices (question F5 response option “a”); and
- Rewarding suppliers for using safer alternatives (question F5 response option “c”).

The actions of Front-runners reveal key steps to integrating safer alternatives into a company, from corporate policy to supply chains (see Figure 5).

“BY PROACTIVELY AND SYSTEMATICALLY SEEKING SAFER ALTERNATIVES TO REPLACE CoHCs, COMPANIES LESSEN THE RISKS OF A ‘REGRETTABLE SUBSTITUTE.’”

FIGURE 4.
CFP 2020 Survey: Senior management accountability and board level engagement — average scores for Front-runners and all other Responders (percent answering affirmatively)

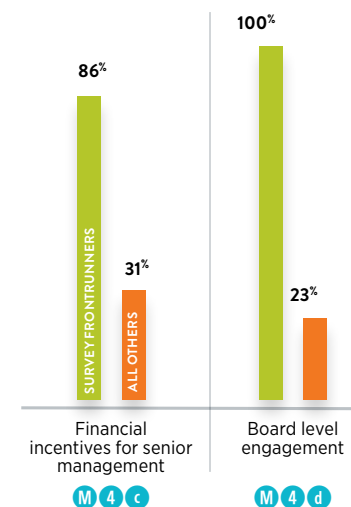
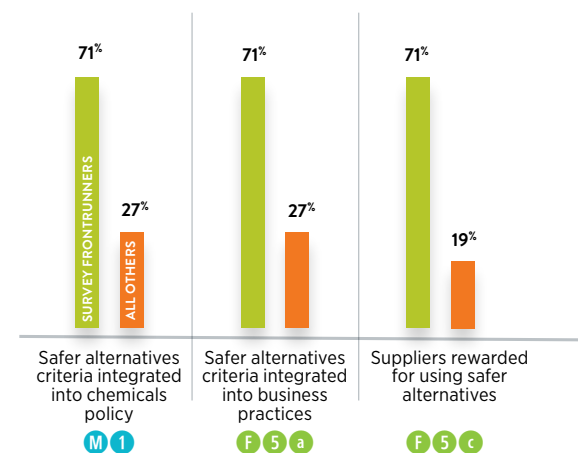


FIGURE 5.
CFP 2020 Survey: Safer alternatives practices — average for Front-runners and all other Responders (percent answering affirmatively)



RB (Reckitt Benckiser)

CFP RESPONDER

PROFILE:

RB's purpose is to protect, heal, and nurture in the relentless pursuit of a cleaner and healthier world. This starts with building sustainability into product design in our innovation process. That's why in 2012 we committed to ensuring a third of our net revenue comes from more sustainable products by the end of 2020 — we're nearly there as we close 2020. It's also why we are investing in science to embed sustainable chemistry into our future product innovations.

Designing with safer ingredients

Ingredient management and governance are priorities within our approach to product stewardship and safeguarding consumers. Ingredients are controlled through a Restricted Substances List (RSL) within a global system that reduces the use of ingredients of potential concern. Our suppliers also provide information on materials and we screen for chemicals of high concern during product design and procurement activities. These measures form the basis of control and are a foundation from which we drive the selection of even safer and more sustainable alternatives. These are promoted through our Sustainable Innovation Calculator (SIC) which is feature of all new global product development.

Our innovation teams, designing new products and/or reworking existing products, are guided by the RSL and the SIC to choose progressively safer and yet equally effective alternatives. As a final safeguard, no new or updated products can enter the market without a full Product Safety Evaluation which confirms compliance with the RSL.

We monitor emerging issues associated with our ingredients and, as a minimum, annually review our RSL and ingredient watch list. This review, carried out by senior leaders within our cross-functional Ingredient Steering Group, considers safety, sustainability, regulatory, and external affairs. For example, any new concerns, changes to existing limits or the acquisition of new product leads to product impact assessments. These can initiate timebound ingredient removal programmes that make sure any products on the market are brought up to the same standards applied to new innovations.

Where new scientific information emerges that changes our understanding about the ingredients we use, we develop new policy positions on their use. These include guidance to aid the selection of safer chemistries, and progressively continue to develop more sustainable products.

Making ingredient information transparent

Our ambition is to fully inform consumers about our brands, with transparency through clear product labelling and online information, perhaps where on-pack space is limited. This labelling continues to improve as we update labels and launch new products. Although it does take time to make these changes, now, more than ¾ of our revenue comes from those products with updated labelling or online information. RB also launched a number of products that specifically use safe and effective alternatives, often from natural organic origins to meet growing consumer demand. These include our new range of eco-certified detergents, Botanical Origins.

RB aims to play our part in combatting climate change and helping to protect ecosystems. Careful management of the ingredients we use, and the footprint of our products helps reduce their environmental impact, while also developing new products that are increasingly demanded by consumers. In doing so, we also appreciate the importance of working with partners, suppliers and our customers. Collaboration both helps to find new solutions and creates greater impact that improves our collective chemical and environmental footprints.



Collaboration both helps to find new solutions and creates greater impact that improves our collective chemical and environmental footprints.”

2020 RESULTS

DISCLOSING TO STAKEHOLDERS

Disclosure questions in the CFP 2020 Survey

DISCLOSED ON COMPANY'S WEBSITE

- Chemicals policy M 1
- Restricted Substances List (RSL) I 2
- Chemicals of High Concern (CoHCs) reduction goal F 1
- Safer alternatives definition F 5
- Chemicals in products D 1

DISCLOSED ON CFP WEBSITE

- CFP responses D 2
- CFP score D 3

What is the willingness of a company to publicly disclose its chemicals management policies, programs, and procedures? The CFP Survey assesses corporate disclosure through two pathways: 1) the disclosure of specific elements of chemicals management on a company's website; and 2) the disclosure of a company's Survey responses and score on the CFP website (see sidebar for details). **Responders demonstrated a reluctance to disclose chemicals management work in general and scored low for disclosing CFP responses and score.**

The 2020 Survey results revealed, once again, that significant chemicals management policies and practices go unshared with the public. Figure 6 depicts that CFP Responders were more likely to have a chemicals policy, RSL, CoHC reduction goal, or safer alternatives definition than to make it public. For example, of all CFP Responders, 78 percent had a CoHC reduction goal (question F1) but only 44 percent shared the goal with the public.

Outside of Front-runners, Responders were also unlikely to agree to have their CFP responses (question D2) and score (question D3) posted on the CFP website (see Figure 7). Responders are more likely to disclose when they know what their score is likely to be, understand how the results are used, have support from senior management, and/or have external pressures demanding or incentivizing disclosure. For example, Mind the Store Campaign's Retailer Report Card gives points to retailers for participating in the Survey, thereby incentivizing retailers to disclose participation in CFP.

The CFP Survey provides a consistent framework for companies to report on chemicals management. Despite the financial materiality of hazardous chemicals in products highlighted above in the "Investors want to know CFP Results" section, companies are reluctant to disclose their chemicals management journey. **Without investors, customers, and NGOs demanding disclosure, most companies are reluctant to share their journey to safer chemicals.**

WITHOUT INVESTORS, CUSTOMERS, AND NGOs DEMANDING DISCLOSURE, MOST COMPANIES ARE RELUCTANT TO SHARE THEIR JOURNEY TO SAFER CHEMICALS.

FIGURE 6. CFP 2020 Survey: Public disclosure of chemicals policy, restricted substances list (RSL), CoHC reduction goal, and safer alternatives definition (percent of all Responders that answered "yes" and disclosed to public)

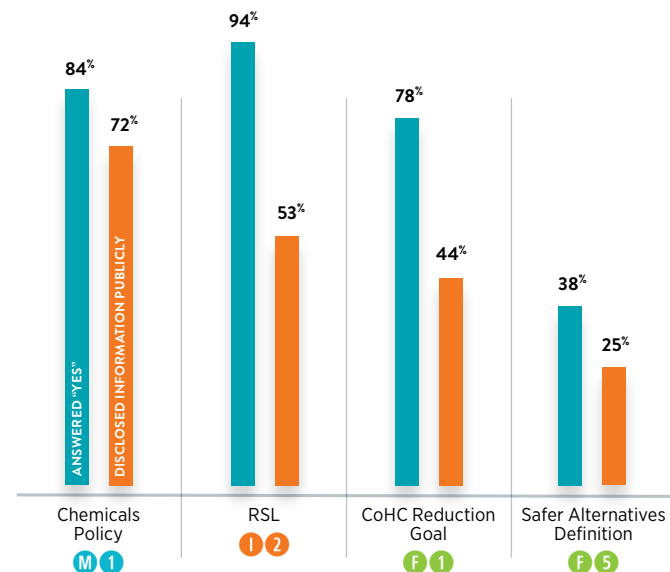
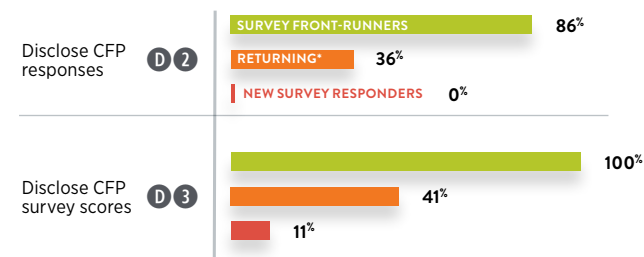


FIGURE 7. CFP 2020 Survey: Responses and score to Survey disclosed to public — average for Front-runners, Returning Responders, and New Responders (percent disclosing to public)



*Returning Responders excluding Front-runners

BEYOND PRODUCTS

REDUCING CoHCs IN MANUFACTURING & PACKAGING

What actions are companies taking beyond products to reduce CoHCs? Here is a snapshot of the actions CFP Responders took to reduce CoHCs in manufacturing operations and packaging.

Companies use chemicals in manufacturing operations, such as cleaners and degreasers, to facilitate production but are not intended for the final product. CoHCs in manufacturing operations, such as methylene chloride, pose risks to workers, fenceline communities, and the environment, and may contaminate the final product. Controlling and managing hazardous chemicals in manufacturing adds to the cost of operations, while using safer chemicals reduces exposures to people and the environment, as well as costs of exposure control, disposal, insurance, and future hazardous waste clean-up liabilities.

In the 2020 Survey, 79 percent of the Responders had manufacturing operations. Actions they took beyond regulatory compliance included: integrated CoHC reduction into business strategy (question M2) and chemicals policy (question M1); and developed manufacturing restricted substances list (MRSL) (question I1) (see Figure 8). **The CFP Survey results revealed manufacturers starting the journey beyond compliance most ambitiously with policies and strategies, and turning more slowly to reducing CoHCs through an MRSL.**

CFP Responders are tackling CoHCs in packaging. Packaging materials are another potential source of exposure to CoHCs, including phthalates, PFAS, and Bisphenol A (BPA). These chemicals can leach into the product the packaging is meant to protect, enter the environment upon disposal, and expose workers during manufacturing.

The majority of Responders to the 2020 Survey, 58 percent, included the reduction of CoHCs in packaging in their chemicals policy (question M1). Additionally, for the first time in 2020, CFP offered Responders the opportunity to answer how they manage chemicals in packaging.

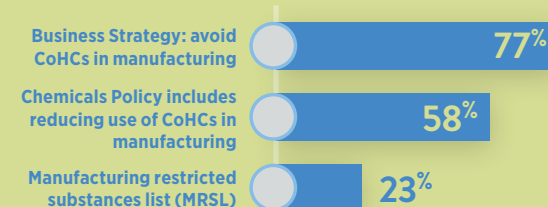
Table 5 lists key actions from the eight Responders who participated in the packaging pilot. Their actions included: creating packaging RSLs; requiring supplier compliance to the RSL; tracking chemical ingredients in packaging; and setting goals for eliminating CoHCs. Companies selling formulated products were more likely to be taking these actions.

TABLE 5.
Highlights from the eight Responders reporting on packaging

5 Responders had packaging RSL, including BPA, phthalates, PFAS, and REACH SCHCs & required suppliers to verify compliance with that RSL	I 1 I 3
2 Responders provided suppliers with guidance documents for safer chemicals in packaging	I 2
4 Responders tracked packaging ingredients in a database	I 5
3 Responders routinely tested packaging themselves for conformance with chemical requirements	I 6
3 responders set goals for eliminating CoHCs in their packaging	F 1



FIGURE 8.
CFP 2020 Survey: Commitments to reducing chemicals of high concern (CoHCs) in manufacturing (percent of Responders with manufacturing operations)



THE MAJORITY OF RESPONDERS TO THE 2020 SURVEY, 58 PERCENT, INCLUDED THE REDUCTION OF CoHCs IN PACKAGING IN THEIR CHEMICALS POLICY.

MEASURING PROGRESS TO ZERO CoHCs

Get started in chemical footprinting with one of five reporting levels:

COUNT OF SVHCs

the easiest calculation uses the European Union's Candidate List of Substances of Very High Concern (SVHCs) and companies report the number of SVHCs contained in products sold. The Candidate List contained 209 chemicals as of June 2020.

MASS OF SVHCs

report weight of SVHCs in products sold.

COUNT OF CoHCs

use the CFP CoHC Reference List and report the number of CoHCs contained in products sold. The Reference List includes over 2,200 chemicals.

MASS OF CoHCs

the most comprehensive calculation requires companies to report the weight of CoHC Reference List chemicals in products sold.

NO COHCs IN PRODUCTS

this is best practice where companies document that their products do not contain any chemicals on the CFP CoHCs Reference List.

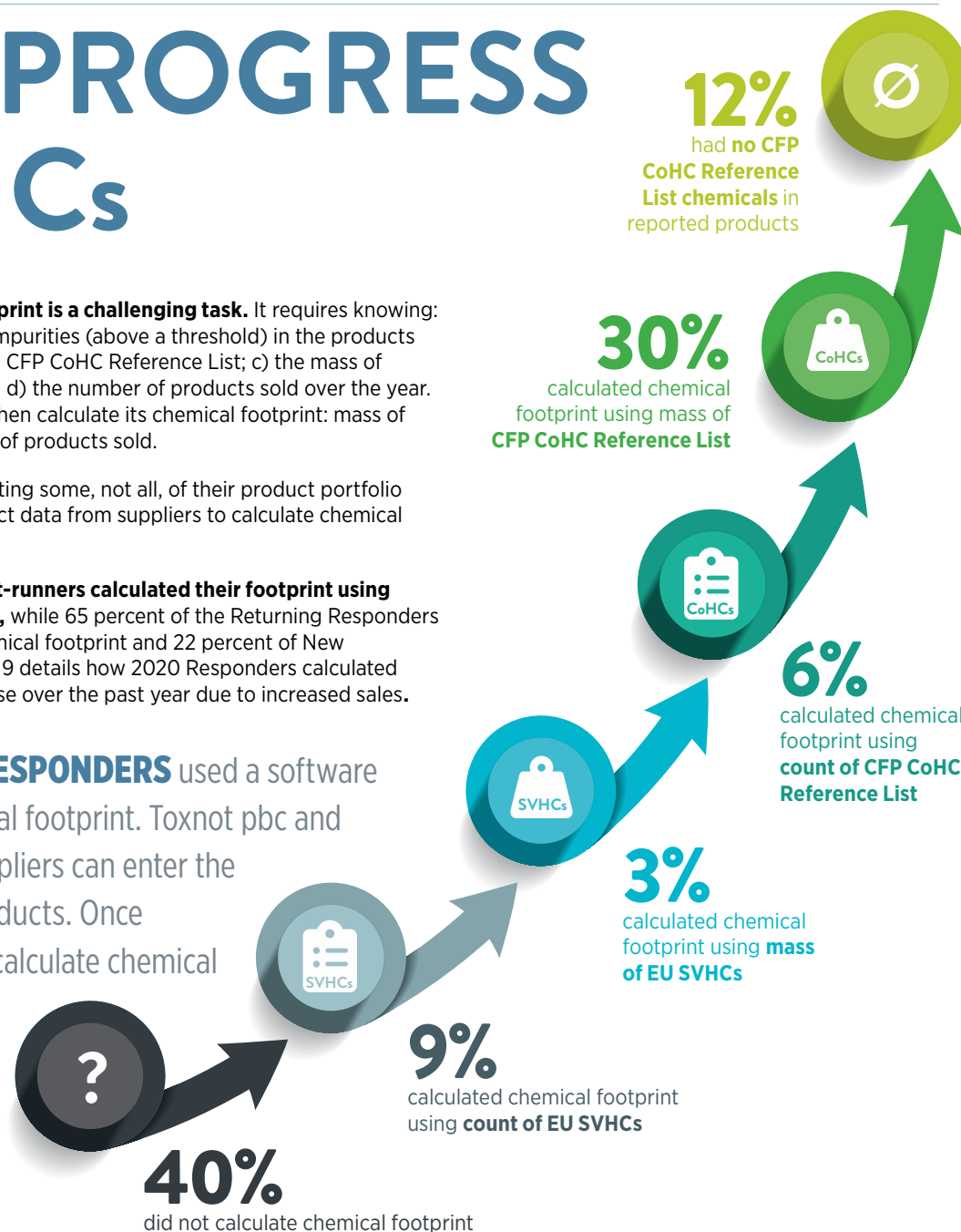
Calculating an organization's chemical footprint is a challenging task. It requires knowing: a) all the chemicals intentionally added and impurities (above a threshold) in the products sold;²³ b) which of those chemicals are on the CFP CoHC Reference List; c) the mass of CoHCs in each product type or category; and d) the number of products sold over the year. With all of that data in hand a company can then calculate its chemical footprint: mass of CoHCs in products multiplied by the number of products sold.

Additionally, companies can start by footprinting some, not all, of their product portfolio and working with software platforms to collect data from suppliers to calculate chemical footprints.

In the 2020 Survey, 100 percent of the Front-runners calculated their footprint using mass of CoHCs or had no CoHCs in products, while 65 percent of the Returning Responders excluding Front-runners calculated their chemical footprint and 22 percent of New Responders calculated their footprint. Figure 9 details how 2020 Responders calculated their chemical footprint. Overall footprints rose over the past year due to increased sales.

FIVE OF THE 2020 SURVEY RESPONDERS used a software platform to calculate their chemical footprint. Toxnot pbc and UL host databases into which suppliers can enter the chemical composition of their products. Once entered, both Toxnot and UL will calculate chemical footprints for CFP Responders.

FIGURE 9. **CFP 2020 Survey: How Responders calculated their chemical footprint in their chosen product scope (question F2)**





JOIN US ON THE CHEMICAL FOOTPRINT JOURNEY

The CFP Survey is a standardized framework for assessing, communicating, and engaging in business progress to safer chemicals. Developed in collaboration with leaders from businesses, NGOs, and investment firms, and managed by the non-profit organization Clean Production Action, the CFP Survey enters its 6th reporting year in 2021.

We welcome investors, NGOs, retailers, health care organizations, and governments to be a CFP Signatory (go to <https://www.chemicalfootprint.org/value/be-a-signatory>) and to engage companies in participating in the 2021 Survey. CFP Signatories agree to engage their stakeholders in participating in the Survey.

We invite companies to participate in the CFP 2021 Survey. Use the Survey to:

- Map next steps in building your chemicals management program.
- Demonstrate leadership by disclosing your Survey responses and score.
- Communicate commitments and progress in chemicals management to key stakeholders, including customers, NGOs, and investors.

Given the financial materiality of chemicals in products, sectors of especial interest to the CFP Survey are:

- Apparel, Accessories, & Footwear
- Building Products & Furnishings
- Hardware (includes electronics)
- Household & Personal Products
- Medical Equipment & Supplies
- Retailers
- Toys & Sporting Goods

The CFP 2021 Survey will be open for participation from March to May 2021. Our CFP Verifiers — Pure Strategies, SAHTECH, and WAP Sustainability Consulting — are helpful resources to understand the value of CFP and documentation requirements

We encourage all companies interested in participating in the Survey to review the questions and response options at <https://www.chemicalfootprint.org/assess/survey-guidance>. Note: it is possible to participate anonymously in the Survey and to report on a partial product portfolio. Join us in 2021 for the 6th Annual CFP Survey!

CFP welcomes...

Investors, purchasers, retailers, and NGOs in engaging companies in participating in the 2021 Survey.

Companies demonstrating their leadership in chemicals management by participating in the 2021 Survey.

The CFP Survey will be open from March to May 2021.

For more information contact us at moreinfo@chemicalfootprint.org or go to <https://chemicalfootprint.org>.

NEW FOR 2021 SURVEY:
PARTICIPANTS WILL HAVE THE OPTION TO REPORT ON PRODUCTS, PACKAGING, OR BOTH, WITH PRODUCTS AND PACKAGING SCORED SEPARATELY.

ENDNOTES

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- Source: https://en.wikipedia.org/wiki/Carbon_footprint.
- Carbon dioxide equivalent: "a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential" (source: https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Carbon_dioxide_equivalent#:~:text=A%20carbon%20dioxide%20equivalent%20or,with%20the%20same%20global%20warming).
- "Environmental health is the branch of public health that: focuses on the relationships between people and their environment; promotes human health and well-being; and fosters healthy and safe communities. Environmental health is a key part of any comprehensive public health system. The field works to advance policies and programs to reduce chemical and other environmental exposures in air, water, soil and food to protect people and provide communities with healthier environments" (source: <https://www.apha.org/topics-and-issues/environmental-health#:~:text=Environmental%20health%20is%20the%20branch,any%20comprehensive%20public%20health%20system>).
- See <https://echa.europa.eu/substances-of-very-high-concern-identification-explained>.
- See <https://www.greenscreenchemicals.org/learn/guidance-and-method-documents-downloads>.
- See <https://www.chemicalfootprint.org/assess/survey-resources-2>.
- For details on measuring a chemical footprint, go to: <https://www.chemicalfootprint.org/learn/measuring-a-chemical-footprint>.
- For details see <https://www.greenscreenchemicals.org/learn/greenscreen-list-translator>.
- Sustainable investing is an investment discipline that considers environmental, social and corporate governance (ESG) criteria to generate long-term competitive financial returns and positive societal impact (source: <https://www.ussif.org/sribasics>).
- For formulated products:** a company knows 100% of the intentionally added substances by mass and any likely impurities that are both a CoHC and present at 100 ppm or higher in the formulation.
For articles: a company knows 95% of the intentionally added substances by mass and any likely impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.



cfp the chemical
footprint project

The Chemical Footprint Project is the first-of-its-kind initiative to measure chemical footprints and assess corporate progress away from hazardous chemicals to safer alternatives. Now companies can chart and report on their progress in reducing hazardous chemicals to a common framework. Signatories to the Chemical Footprint Project include investors with over \$2 trillion in assets under management and purchasers with over \$800 billion in procurement power. Together with these supporters we engage brands in assessing and reporting their chemicals management policies, procedures, and practices through the annual CFP Survey. Founded by Clean Production Action, Lowell Center for Sustainable Production at the University of Massachusetts Lowell, and Pure Strategies in 2014, CFP is now a program of Clean Production Action.



Clean Production Action's mission is to design and deliver strategic solutions for green chemicals, sustainable materials, and environmentally preferable products. We are a solutions organization. Our tools, GreenScreen® for Safer Chemicals and Chemical Footprint Project, simplify the complexity of substituting chemicals of concern to human health and the environment with green chemistry solutions. Our collaborations, BizNGO and Investor Environmental Health Network, provide effective platforms for practitioners and thought leaders to work together in advancing chemicals, materials, products, and systems that are healthy for people and the planet. Together our tools and collaborations are transforming the toxic chemical economy into one that is healthy for people and the planet.

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chemicalfootprint.org



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A program of Clean Production Action

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