

Corporate  
Information  
Transparency  
Index

# GREENING THE GLOBAL SUPPLY CHAIN

CITI Index **2017** Annual Evaluation Report Summary



**IPE**  
Institute of Public & Environmental Affairs  
公众环境研究中心



**NRDC**  
NATURAL RESOURCES  
DEFENSE COUNCIL



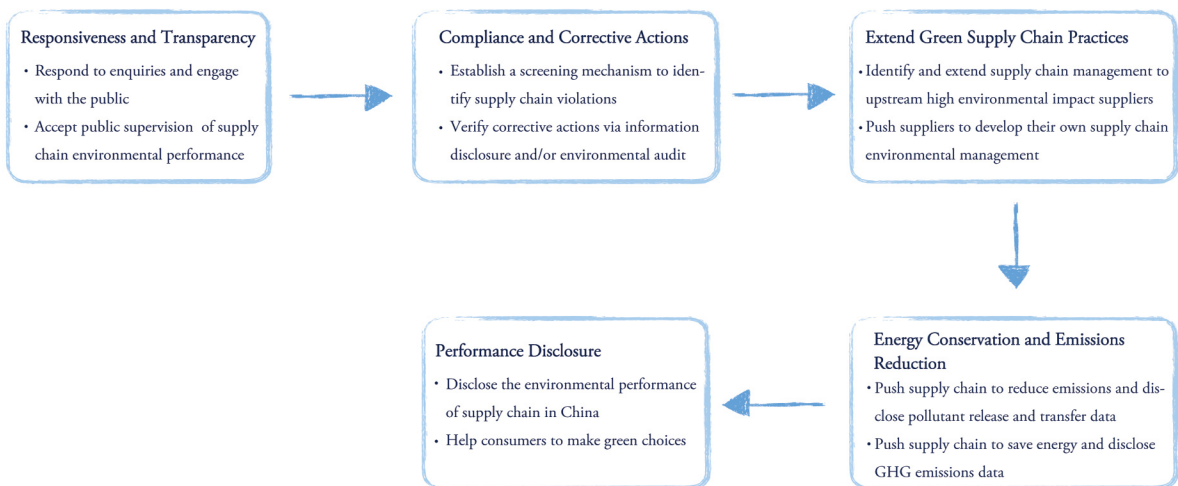
# The Corporate Information Transparency Index (CITI)

## What is the CITI?

The Corporate Information Transparency Index (CITI) is a system for evaluating brands' green supply chain practices that was jointly developed by the Institute of Public & Environmental Affairs (IPE) and the Natural Resources Defense Council (NRDC). IPE uses this index to dynamically assess the environmental performance of brands' supply chains in China based on public data, including government compliance data, online monitoring data, confirmed public complaint records, self-reporting and third-party environmental audits.<sup>1</sup>

## Main Assessment Areas

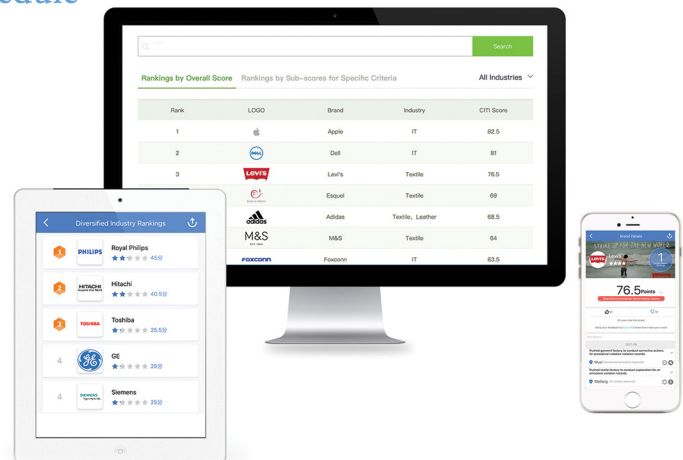
The CITI evaluation criteria apply a progressive step-by-step structure across five main evaluation areas. The index thus not only serves as a tool to benchmark brands' supply chain environmental performance, but also provides a road map that guides brands on how to green their supply chains.



## CITI Updating & Publication Schedule

Annual Report: CITI evaluation results of brands and industries

Dynamic Updates: Real-time CITI rankings on IPE's website and the Blue Map app



<sup>1</sup>NRDC does not participate in the scoring process.

## Scope of 2017 CITI Evaluation

- CITI grows to include 14 industries: Newly added industries include shared bicycles, pharmaceuticals, industrial chemicals, and real estate. In addition, “dairy” has been separated from the food & beverage category.

































- Extension to 267 brands hailing from five main regions: Greater China, Europe, North America, Japan & South Korea, and Oceania & Southeast Asia.





## Top 30

<b>01</b> (Change in Rank)  82.5 (Score)	<b>02</b> +1  81	<b>03</b> +1  76.5	<b>04</b> +13  ESQUEL GROUP 69	<b>05</b> -3  68.5
<b>06</b> -1  EST. 1884 64	<b>07</b> +6  63.5	<b>08</b> --  61	<b>08</b> +1  61	<b>10</b> +6  59.5
<b>11</b> +4  59	<b>12</b> -5  57	<b>12</b> -2  57	<b>14</b> -8  56.5	<b>15</b> -4  54
<b>16</b> +50  49	<b>17</b> -5  HUAWEI 47	<b>18</b> -1  45.5	<b>18</b> -4  45.5	<b>20</b> +5  45
<b>21</b> +14 领取新未来  42.5	<b>22</b> NEW  朗朗乾坤 诗意人生 41.5	<b>23</b> -2  41	<b>23</b> +34  DANONE ONE PLANET. ONE HEALTH 41	<b>25</b> --  40.5
<b>25</b> -5  Inspire the Next 40.5	<b>25</b> +25  TAKING YOU FORWARD 40.5	<b>28</b> +22  40	<b>29</b> +26  39.5	<b>30</b> +3  38.5

## CITI Top 100

Rank	Logo	Brand	Industry	CITI Score	Change in Rank
1		Apple	IT	82.5	--
2		Dell	IT	81	+1
3		Levi's	Textile	76.5	+1
4		Esquel	Textile	69	+13
5		Adidas	Textile, Leather	68.5	-3
6		M&S	Textile	64	-1
7		Foxconn	IT	63.5	+6
8		Gap	Textile	61	--
8		Samsung	IT	61	+1
10		Puma	Textile, Leather	59.5	+6
11		H&M	Textile	59	+4
12		Panasonic	IT	57	-5
12		Walmart	Textile	57	-2

## CITI Top 100

Rank	Logo	Brand	Industry	CITI Score	Change in Rank
14		Target	Textile	56.5	-8
15		ZARA	Textile	54	-4
16		New Balance	Leather	49	+50
17		Huawei	IT	47	-5
18		hp	IT	45.5	-1
18		Kao	Personal Care	45.5	-4
20		Royal Philips	Diversified	45	+5
21		Oji	Paper	42.5	+14
22		Landsea	Real Estate	41.5	NEW
23		Canon	IT	41	-2
23		Danone	Food & Beverage	41	+34
25		Coca Cola	Food & Beverage	40.5	--
25		Hitachi	Diversified	40.5	-5

## CITI Top 100

Rank	Logo	Brand	Industry	CITI Score	Change in Rank
25	 ERICSSON TAKING YOU FORWARD	Ericsson	IT	40.5	+25
28		Esprit	Textile	40	+22
29		Primark	Textile	39.5	+26
30		Asics	Leather	38.5	+3
31		Mothercare	Textile	38	+6
31		IKEA	Textile	38	-10
33		Nike	Textile, Leather	37	-9
34		C&A	Textile	36	-6
35		Burberry	Textile, Leather	34	+10
35		TCL	IT	34	+3
37		Columbia	Textile, Leather	33	-6
38		Microsoft	IT	32	-19
39		Carrefour	Textile	30	-9



## CITI Top 100

Rank	Logo	Brand	Industry	CITI Score	Change in Rank
39		Vanke	Real Estate	30	NEW
41		Ann Taylor	Textile	29.5	+1
41		Cisco	IT	29.5	+2
43		Tesco	Textile	28.5	+2
44		Li-Ning	Textile, Leather	28	+17
45		Nokia	IT	26.5	--
45		Lindex	Textile	26.5	-1
47		Toshiba	Diversified	25.5	-12
47		Uniqlo	Textile	25.5	-24
49		Siemens	Diversified	25	-1
49		GE	Diversified	25	-15
49		Unilever	Personal Care, Food & Beverage	25	-22
52		Mizuno	Textile, Leather	24.5	-20

## CITI Top 100

Rank	Logo	Brand	Industry	CITI Score	Change in Rank
53		Toyota	Automobile	21	+38
54		BRC Group	Real Estate	20.5	NEW
55		DyStar	Industrial Chemicals	17.5	NEW
56		FCA Group	Automobile	16.5	NEW
57		G-Star	Textile	16	+9
58		Intel	IT	15.5	-6
58		ecco	Leather	15.5	+56
58		Xi'an Gaoke Group	Real Estate	15.5	NEW
61		Bestseller	Textile	15	-32
62		BASF	Industrial Chemicals	14	NEW
63		Nestle	Dairy, Food & Beverage	13.5	+16
63		Mengniu	Dairy	13.5	+75
65		Sharp	IT	13	-12

## CITI Top 100










Rank	Logo	Brand	Industry	CITI Score	Change in Rank
65	 旭辉集团 用心经营美好生活	CIFI	Real Estate	13	NEW
65	 建业住宅集团 JIAN YE REAL ESTATE GROUP	Central China	Real Estate	13	NEW
68	 Lee	Lee Jeans	Textile	12.5	-29
68	 Clarks	Clarks	Leather	12.5	-7
70	 Mobike 摩拜单车	Mobike	Shared Bike	12	NEW
70	 Tahoe 泰禾	Tahoe	Real Estate	12	NEW
70	 万通地产 VANTONE	Vantone	Real Estate	12	NEW
70	 中粮地产 COFCO PROPERTY	COFCO Property	Real Estate	12	NEW
70	 北科建集团 B S D	BSD	Real Estate	12	NEW
75	 SANTAK® 祥泰实业	Samtak	Real Estate	11.5	NEW
75	 天鸿地产 TENHONG LAND	Tenhong Land	Real Estate	11.5	NEW
75	 立景地产 LUCKYKING	Luckyking	Real Estate	11.5	NEW
75	 Hodo 红岛置业 —关爱 呵护 筑家—	Hodo	Real Estate	11.5	NEW

## CITI Top 100







Rank	Logo	Brand	Industry	CITI Score	Change in Rank
75		Sinyi Realty	Real Estate	11.5	NEW
75		Chengdu Jiaoda	Real Estate	11.5	NEW
75		Anhui Xinyi	Real Estate	11.5	NEW
82		RB	Personal Care	10.5	NEW
82		Hugo Boss	Textile	10.5	-12
82		Sears	Textile	10.5	+39
82		The North Face	Textile, Leather	10.5	-43
82		Timberland	Textile, Leather	10.5	-43
82		P&G	Personal Care	10.5	-3
82		Volkswagen	Automobile	10.5	+28
82		Youngor	Textile	10.5	-21
82		BMW	Automobile	10.5	-25
82		Mercedes-Benz	Automobile	10.5	-26












## CITI Top 100

Rank	Logo	Brand	Industry	CITI Score	Change in Rank
92		AB InBev	Brewing	9.5	-21
93		IBM	IT	9	+21
94		Singtel	IT	8.5	+44
94		Tommy Hilfiger	Textile	8.5	-33
94		LG	IT	8.5	+4
94		Disney	Textile, Leather	8.5	-19
98		Lenovo	IT	8	-49
99		ofo	Shared Bike	8	NEW
100		Benetton	Textile	7.5	-39

Division of Brand Scores among Industries

SCORE INDUSTRY	100-80	80-60	60-40	40-20	< 20				
 IT	Apple Dell	Foxconn Samsung	Panasonic Huawei HP Canon Ericsson	TCL Nokia  Microsoft  Cisco	Intel LG Sony Hisense MEIZU	Sharp Lenovo HTC Haier Xiaomi	IBM Seiko Epson ZTE GREE BT	Singtel Vodafone Motorola Midea	
 Diversified			Royal Philips Hitachi	Toshiba  Siemens  GE		G-Star Sears Tommy Hilfiger Abercrombie & Fitch	Bestseller The North Face Disney Guess Polo Ralph Lauren Next HLA MANGO Macy's Kappa	Lee Jeans Timberland Benetton Victoria's Secret ANTA Valentino River Island Umbro Meters/bonwe Toread	HUGO BOSS Youngor CK J.C. Penney Cortefiel MUJI Forever 21 Lacoste DKNY Lafuma
 Textile		Levi's Esquel Adidas Marks and Spencer Gap	Puma H&M Walmart Target ZARA	Esprit IKEA Burberry Ann Taylor Lindex  Primark Nike Columbia Tesco Uniqlo  Mothercare C&A Carrefour Li-Ning Mizuno	Giordano Armani K-BOXING ROXY HEAD 361° ecco				
 Leather		Adidas	Puma	New Balance Burberry Mizuno  Asics Columbia  Nike Li-Ning	Disney COACH Prada Umbro Nine West Kappa	Clarks Tiffany Samsonite Daphne Pierre Cardin Kangnai Belle	The North Face UGG ANTA Spalding Lacoste CHANEL Aokang Toread	Timberland Kate Spade Armani Hush Puppies HEAD 361° Toread	
 Food and Beverage			Danone Coca-Cola	Unilever	Nestlé Pepsi Want-Want Wahaha Uni-president	Dachan General Mills Burger King Nongfu Spring Master Kong	COFCO Kraft Heinz Mondelēz International CP Dicos	McDonald's Shuanghui Mars KFC Oishi	
 Dairy					Nestlé Modern Farming	Mengniu New Hope	Pepsi Beingmate	Fontterra SANYUAN	

SCORE INDUSTRY	100-80	80-60	60-40	40-20	< 20
 Dairy					Want-Want Tianyou Brightdairy Wondersun Huishan Junlebao Yili
 Brewing					AB InBev Carlsberg Senli Yanjing Beer Asahi Heineken Tsingtao Snowbeer Gengquan
 Paper			Oji Paper		Stora Enso Hengan Chen Ming Group HTRH Qingyuan APP Yuen Foong Yu Shanxing Paper Long Chen Paper C&S Sun Paper UPM Tranlin
 Automobile				Toyota	FCA Group Ford Nissan BYD Great Wall Volkswagen Mercedes-Benz BMW PSA Group KIA Chery
 Shared Bicycle					Mobike ReckittBenckiser Colgate-Palmolive Ofo Bluegogo
 Household and Personal Care			Kao	Unilever	Nice Bluemoon Kaimi DyStar Merck Group Bayer Sanofi Johnson&Johnson Bayer P&G AVON Watsons Hanho Whitecat L'Oréal Jahwa Chando Union LMZ Johnson&Johnson Liby
 Industrial Chemicals					Merck Group Bayer Sanofi Novartis GlaxoSmithKline BASF Clariant Arkema AKZO DuPont Eastman DSM Merck Group Pfizer
 Pharmaceuticals					Johnson&Johnson Bayer Sanofi Novartis GlaxoSmithKline Boehringer-Ingelheim Merck & Co.
 Real Estate			Landsea Group	VANKE BRC Group	Xian Gaoke Group Vantone Tenhong Land Chengdu Jiada Real Estate CIFL COFCO Property Luckyking Anhui Xinyi Group Country Garden Central China Real Estate Tahoe Samtak Sinyi Realty Evergrande

## Industry Performance

Industry	Industry Performance	Progress in Leading Brands' Upstream Extension of Management (Supply Chain Segment)	Average Total Score
Diversified	Brands continue to perform well	Metals raw materials production, centralized wastewater treatment plants, hazardous waste treatment facilities  	32.2
IT	IT industry brand performance remains somewhat polarized	Metals raw materials production, centralized wastewater treatment plants, hazardous waste treatment facilities       	22.8
Textiles	More textile brands begin to focus on supplier compliance and emissions reduction	Dyeing auxiliaries production, centralized wastewater treatment plants, hazardous waste treatment facilities      	19.7
Real Estate (New)	Industry launched the first white list; implementation is pending	Iron and steel, cement, glass and paint production  	13.9
Leather	Brands that also touch on the textile industry continue to perform well, but many other brands have not begun to take action	Dyeing auxiliaries production, centralized wastewater treatment plants, hazardous waste treatment facilities  	12.3
Shared Bicycle (New)	Leading brands only respond passively to cases raised	Yet to touch on spare parts and metals raw materials production	7.3
Automobile	Slow to push suppliers; brands generally turn a blind eye to supply chain environmental pollution	Yet to touch on spare parts, tires, glass, batteries, leather and metals raw materials production	7.1
Food & Beverage	Majority of brands have not begun to initiate green procurement	Sugar, additives, and packaging production  	6.7
Household & Personal Care	Small number of international brands have begun to substantively promote green supply chain	Yet to touch on the production of chemicals raw materials	6.1
Industrial Chemicals (New)	Only a handful of companies have been pushed by textile industry brands to make passive responses	Yet to touch on chemicals raw materials production	5.7
Dairy (New)	Brands have yet to confront supply chain environmental pollution	Yet to touch on wastewater and waste disposal from livestock farming processes	4.0
Pharmaceuticals (New)	International brands involved in PSCI raise supply chain environmental compliance requirements, but brands still lack substantive progress	Yet to touch on pharmaceutical intermediates production, centralized wastewater treatment plants, and hazardous waste treatment facilities	3.9
Paper	Leading brands have made progress, but most brands' progress is slow	Pulp production 	3.8
Brewing	Brands generally neglect supply chain environmental pollution	Yet to touch on alcohol fermentation, centralized wastewater treatment facilities	3.3



## Enforcement and Policy Environment Favors Green Supply Chain

### Strengthened environmental supervision raises the cost of violations

In 2016, the Chinese government launched a series of central environmental inspections in order to tackle China's severe air, water and soil pollution. Up through September 2017, the inspections had already covered 31 provinces, autonomous regions and provincial-level municipalities across China. The environmental inspections have not only investigated and accordingly handled tens of thousands of cases of enterprise environmental violations, but have also put pressure on local officials, finally helping to begin working through issues of local protectionism toward polluting enterprises.

Compared to limited fines typically levied in the past, punishments issued to violating enterprises over the course of inspections, such as the frequent ceasing of production for improvements and shut down orders, may sharply raise the cost of violations for enterprises. From a long-term perspective, these higher costs will be advantageous toward reversing the previous system of perverse incentives where those who pollute reap benefits, and will force enterprises to internalize the costs of pollution, thus making brands' green procurement become economically rational.

### “Supply shortage storm” draws attention to supply chain operational risks

The “Schaeffler supply shortage” incident of September 2017 sparked concern from many different parties due to the CEO's claim that it would lead to total losses of 300 billion RMB. The substantial strengthening of environmental enforcement has caught unprepared those automobile brands that have disregarded supply chain environmental pollution issues for too long.

Shirking environmental responsibility and shifting the environmental burden of supply chain production to communities and the public also remains a prevalent practice across the food & beverage, dairy, paper, brewing, and household & personal care industries, as well as the newly added industries of pharmaceuticals and industrial chemicals. Facing even specific questions about supply chain pollution raised by environmental groups, a majority of brands in the aforementioned industries still opt to respond by remaining silent.

Under the old system of laws where the cost of violations for polluters was low, avoidance and indifference were undoubtedly an avenue for brands to make money. However, in confronting the major trend of China's strengthened environmental supervision, long-term ignorance of supply chain pollution issues not only runs counter to corporate social responsibility requirements, but also causes real risks to enterprises' operations, and may even result in significant economic damages.

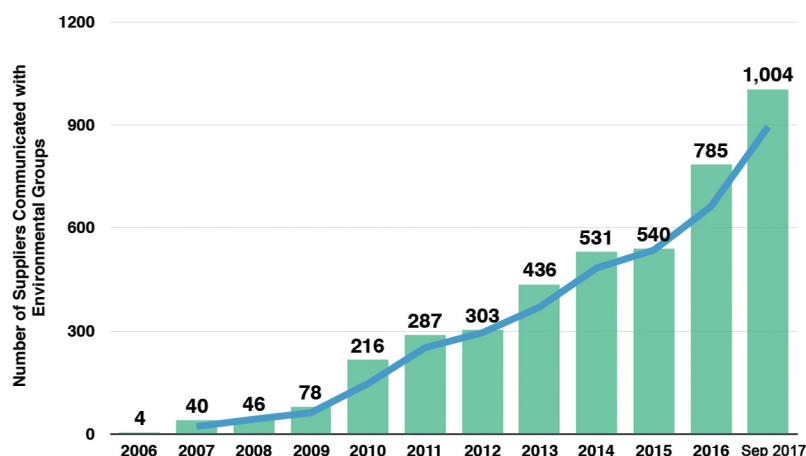
### China releases more policies and measures related to green supply chain

- The State Council promulgated the 13th Five-Year Plan for Ecological and Environmental Protection, requiring all localities to continuously promote supply-side structural reforms, encourage green manufacturing and green products for production and supply, and develop green supply chains;
- The Ministry of Environmental Protection (MEP) jointly issued the Guiding Opinion on Promoting the Construction of a Green ‘One Belt One Road’ along with four other ministries. The Guiding Opinion proposes to “strengthen green supply chain management; promote green production, green procurement and green consumption; strengthen green supply chain international cooperation and demonstrations; impel upstream and downstream supply chains to adopt energy-saving and environmental measures; and use market mechanisms to reduce ecological and environmental impacts”;
- The General Administration of Quality Supervision, Inspection and Quarantine along with the Joint Commission International (JCI) published the Guidelines on Green Manufacturing and Green Supply Chain Management for Manufacturing Enterprises to hasten and promote the process of standardization for supply chain environmental management;
- The Ministry of Industry and Information Technology (MIIT) drafted the Social Responsibility Guidelines for the Electronics and Information Technology Industry, which aim to promote even more enterprises to realize green procurement and construct supply chains that are sustainable, responsible, and set an example worthy of sharing.

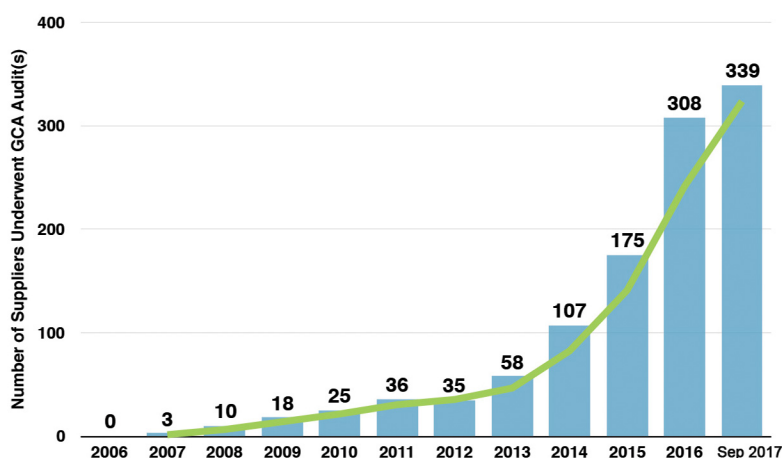
## A Number of International and Chinese Brands Actively Drive Supplier Improvements

### Information disclosure continues to drive more enterprises to control pollution and reduce emissions

In this round of the evaluation, 59 brands from the textiles, leather, IT, diversified, paper, food & beverage, household & personal care, shared bicycles and automobile industries motivated suppliers to communicate with environmental groups. A total of 4,270 suppliers had communicated with environmental groups up through September 30, 2017.



Among these companies, 37 brands motivated suppliers to undergo green choice alliance (GCA) audits to verify the effectiveness of corrective actions and publicly disclose their audit reports in order to accept societal supervision toward their rectifications. As of September 30, 2017, brands had motivated 1,297 suppliers to undergo GCA audits.



## Leading brands incorporate supply chain environmental management into their sourcing codes

In this round of the evaluation, leading brands have continued to focus on supplier environmental performance and actively manage supply chain environmental compliance risks. Brands have incorporated the Blue Map Database into their supplier environmental management mechanisms, continuing to push problem suppliers to implement corrective actions and issue related explanations.



We utilize environmental data collected by IPE to help identify areas for improvement in our suppliers' environmental performance, and we invite IPE personnel to provide oversight on ensuing remediation of any identified gaps. This has resulted in closure of 196 issues identified by local environmental authorities since 2012, including 23 in 2016 alone. In each of these cases, IPE directly facilitated and supervised independent third-party validation of the enhancements made. Further, 100 percent of our suppliers involved in this process continue to share annual environmental monitoring data through IPE's platform to transparently demonstrate that their improvements are sustained.

*Apple Supplier Responsibility 2017 Progress Report*



In fact, we have been collaborating with the IPE since 2011. Once notified by them, we partnered with our suppliers to work on their environmental violations until they were fully addressed. We also conducted monthly screenings of our suppliers' presence in the IPE database.

*2016 Adidas Sustainability Progress Report*

### Panasonic

In order to raise the brand value of our company, and to help minimize sourcing risks, we promote and use IPE's green supply chain rankings as a criterion for environmental risk management.

*Panasonic China Corporate Social Responsibility Report 2016-2017*



M&S doesn't use any dyehouses on the IPE's 'blacklist' and we are encouraging all the dyehouses that process M&S fabrics to share their data with the IPE.

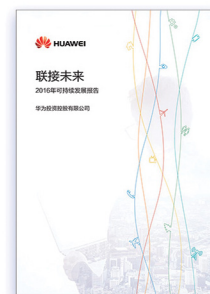
*M&S Plan A Report 2016*





Since 2011, Huawei has been a member of the Green Choice Alliance, which was established by the Institute of Public and Environmental Affairs (IPE), a non-governmental organization. We have added a query function connected to the IPE's enterprise environmental database to our supplier audit list and supplier self-checklist. When query results show that a supplier violates environmental rules, Huawei immediately asks them to solve the problems within a designated timeframe. In 2016, routine queries about the environmental data of 500 key suppliers revealed 15 violations of environmental protection rules. Together with the IPE, we audited ten suppliers onsite and asked that they make improvements within a predefined timeframe to meet our requirements.

*Connecting the Future - 2016 Sustainability Report*



In 2015, Oji China began to establish a supply chain screening mechanism, using the Pollution Map established by the NGO the Institute of Public & Environmental Affairs (IPE). Oji began carrying out screenings of Oji-invested enterprises in China and their key suppliers and actively promoting improvements to environmental issues.

*Oji China Sustainability Report 2016*

## Brands take proactive actions to manage supply chain risks

In response to the new norm of strengthened supervision, more brands have begun to extend supply chain management upstream as means of controlling potential business risks.

Taking the IT industry as an example, during the recent round of central environmental inspections, 18 centralized wastewater treatment plants in the Shanghai area were found to have issues with heavy metals in wastewater exceeding legal standards. Facing severe consequences, the wastewater treatment facilities declared that the “culprit” is actually enterprises that discharge effluent into pipes without permits or whose effluent exceeds pre-treatment standards. As a result, two large-scale electronics plants will be forced to shut down.

Supply chain operational risks resulting from similar initiatives have prompted more brands to pay attention to CITI Index indicator 2.3, which focuses on issues with centralized wastewater treatment. A total of 18 brands have mapped their suppliers' path of wastewater discharge using questionnaires, PRTR data and other means. Among them, seven brands – Apple, Dell, Esquel, M&S, Walmart, Ericsson and Levi's – incorporated their suppliers' centralized wastewater treatment facilities into the scope of environmental compliance screenings. These brands use e-mails, letters and other methods to inform violating wastewater treatment facilities of their issues. Ericsson and Levi's were the first in their respective industries to each push a centralized wastewater treatment facility with violation records to accept a GCA third-party audit.

Similarly, in the wake of increased supervision toward hazardous chemicals, IT industry brands including Apple, Dell, Samsung, Panasonic, and Huawei have extended supply chain environmental risk management to treatment of hazardous waste. In this round of the evaluation, first-ranking Apple took the lead by incorporating metals raw materials production enterprises into its supplier environmental management scope. The brand prompted an aluminum supplier to issue a public explanation about its violation issues and related corrective measures.

Textile brands have likewise begun to pay attention to the environmental burden posed by the production and processing of chemical dyestuffs and auxiliaries. Companies such as Esquel have motivated suppliers with violations to issue public explanations about their supervision records and undergo GCA audits. Levi's pushed its key suppliers to establish mechanisms for upstream supply chain environmental risk screening, including such supply chain segments as cloth production, washing and centralized wastewater treatment.



## More Chinese brands launch green procurement initiatives

Among Chinese brands, Huawei, TCL, and Li Ning have actively responded to stakeholders about their supply chain environmental compliance accountability as they expand business internationally. These brands have continued to push suppliers to improve their environmental performance, reduce greenhouse gas (GHG) emissions, and used annual CSR reports and other open channels to disclose their green supply chain development results to the public.

Since its launch on June 5, 2016, the “real estate green supply chain initiative” has formulated and published the Heavy Emissions Control Plan (Iron & Steel, Cement) White List Evaluation Guidelines. Enterprises have been investigated, and two sets of white lists of enterprises have subsequently been issued. These white lists are based on supplier lists provided by property developers participating in this green initiative, as well as lists of enterprises that conform to requirements issued by the Ministry of Industry and Information Technology (MIIT).

As one of the initiating parties of the green initiative, Landsea Green Real Estate has motivated nine suppliers to openly address violation issues, touching on the heavy emissions industries of cement, iron and steel, paint, glass and construction materials. Vanke has continuously promoted a “chromium-free aluminum alloy passivation” project, lowering the amount of hexavalent chromium in passivation of aluminum alloy for doors and windows and decreasing the burden that passivation wastewater poses on the environment.



## A handful of brands make strides toward “transparency 2.0”

Not only did the number of brands disclosing supplier lists increase in this round of the evaluation, but a group of leading brands also opted to participate in IPE’s development of a supply chain map based on supplier location and affiliated supplier environmental performance, taking an additional step toward raising the bar for supplier transparency.



(Above icons do not represent suppliers’ real locations)

## Insufficient capacity hinders the implementation of green procurement

### Brands confront limitations in the form of capacity bottlenecks

As the Chinese government extensively increases the force of environmental supervision, environmental information has made strides toward today's situation of real-time disclosure. Yet, brands and companies still have yet to ramp up the scale of motivating improvements among problem suppliers. The capacity bottleneck is a significant contributing factor to this situation.

Long supply chains involving massive numbers of suppliers and high environmental impact segments that are oftentimes found upstream in supply chains create high demands on management capacity and investments in resources. Regional and industrial standards are complex, and the number of supervision records is soaring. Even multinational companies that have carried out supply chain social responsibility management for nearly twenty years confront challenges.

For example, human resources and management cost restrictions cause the frequency of most leading brands' environmental compliance screenings to remain at quarterly or even bi-annually. As a result, suppliers do not necessarily receive timely requests from their customer brands about violations and corrective actions. This situation not only limits the impact of green procurement on promoting energy savings and emissions reductions, but also exposes brands to operational risks.

Moreover, brands from the Chinese mainland are held back by limited capacity more so than their multinational counterparts. Looking at the example of companies involved in the real estate green supply chain initiative, apart from the leading brands of Landsea and Vanke, most brands do not meet the demands for management systems to personnel resources required for green procurement. It is difficult for these brands to replicate the accumulated experience and costs invested by multinational companies in only a short period of time.

For instance, examining the shared bicycles industry, the two current leaders – Mobike and Ofo – have each only pushed one supplier to communicate with environmental groups about violation record issues. However, with their massive production output and subsequent anticipated scrap volume, surface-level efforts will be far from able to solve the industry's supply chain environmental impacts. The question of how to fulfill brands' environmental responsibility in a business environment where companies are throwing money to out-compete one another for market share, as well as how to tackle supply chain issues for new industries, will require new solutions.



Pushed bicycle factory to issue an explanation for air emissions, procedural violation records.

This factory, through motivation from its customer brand ofo, actively communicated with environmental groups to issue an explanation for its violation record(s) from the year(s) 2013, 2015, 2016, 2017.

Beichen

Publication Date: 2017-09-06



Pushed bicycle components factory to issue an explanation for wastewater, air emissions, solid waste violation records.

This factory, through motivation from its customer brand mobike, actively communicated with environmental groups to issue an explanation for its violation record(s) from the year(s) 2010, 2011, 2014, 2015, 2016.

TaiCang

Publication Date: 2017-07-25

## Capacity bottlenecks similarly influence supply chain improvements

Under the current “storm” of strengthened supervision, supplier enterprises receive direct impacts and real operational risks, which have already motivated more enterprises to improve. The challenges that joint venture enterprises and large-scale local enterprises face notwithstanding, when confronting complicated standards and frequent supervision and information disclosure, suppliers will also have to increasingly face and improve their poor upstream supply chain environmental management, so continuing to overcome the capacity bottleneck may become even more difficult.

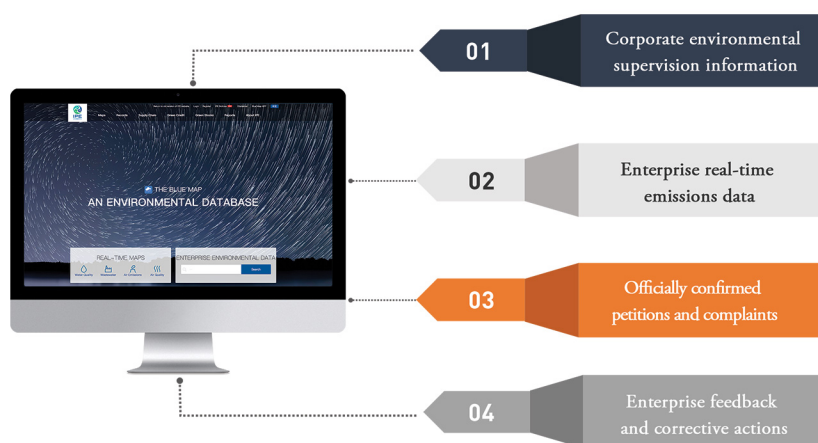
## Going Green Requires Innovative Solutions

Traditional training and consulting services are essential to solving the limitations of the capacity bottleneck – but it is difficult for their efficiency to fully meet the massive and formidable needs of going green. It is therefore necessary to join forces to develop innovative solutions for green supply chain.

## Environmental information disclosure provides a basis for large-scale expansion toward big data as a solution

### 2006–2017 Upgrade & Expansion of Blue Map Database

Collating environmental quality, emissions and pollution source information from government departments

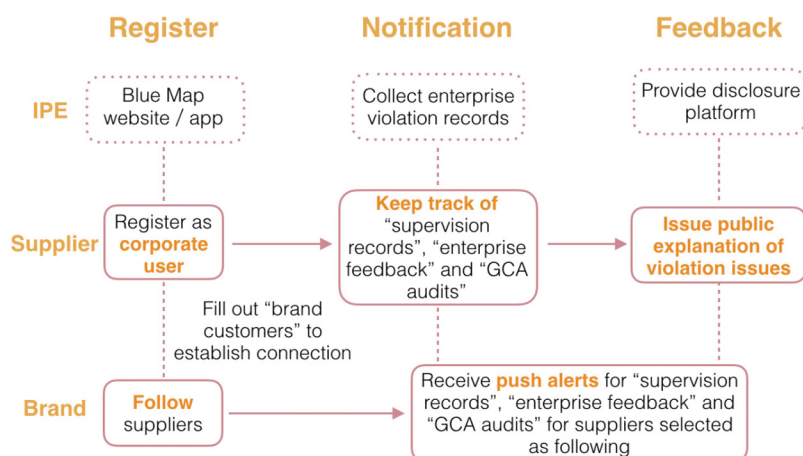


The central government environmental inspections and the extensive review of construction project legal compliance have exposed the violation issues of a large number of enterprises for the first time. The number of enterprise violation records collected by the Blue Map Database has grown from not even 2000 records in 2006 to adding around 70,000 new records in 2016; in 2017, the cumulative number of records in the database has already exceeded 550,000. China’s historical progress in environmental information disclosure will create strong support for building a data-based green supply chain management system.



## Multi-party cooperation recommended in order to establish an internet-based supply chain management system

In order to help international and Chinese brands solve the capacity and resources bottleneck hampering supply chain environmental management, IPE is launching version 1.0 of an internet-based supply chain environmental management tool built on IPE's consolidation of environmental data resources – providing internet and mobile users with a supply chain management platform based on the Blue Map Database.



### Basic Functions

- Environmental supervision record notifications: Users receive dynamic, instantaneous updates regarding enterprise environmental violation records, public feedback and GCA audits based on IPE's daily tracking of around 1,700 data sources;
- Automated supply chain management for brands: Instantaneous access to supplier environmental supervision record information. Automatically forms management reports. Also includes synchronized access to supplier public feedback and GCA audit push alert updates;
- Synchronized alerts for three parties (optional): Brands and suppliers can receive synchronized alerts of enterprise environmental violations to facilitate prompt feedback about records and corrective actions in the Blue Map Database, thus mitigating supply chain operational risks.

### Uses and Significance

- Increases the efficiency of brands' and enterprises' supply chain environmental management, and significantly reduces management costs;
- Takes suppliers as equal participants and partners in environmental risk management;
- Raises the level of corporate environmental information disclosure, opens up enterprises to public supervision, and forges societal trust;
- Supports the extension of green supply chain upstream, helping to realize extensive energy and emissions reductions.



(Scan the QR code to download the Blue Map app / Register as a corporate user on IPE's website <http://www.ipe.org.cn/User/UserRegister.aspx>)

# Acknowledgements

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We would like to thank those who participated in “green choice” field research, including Lvse Jiangnan and other environmental groups, as well as Guangdong Harmony Foundation and other institutions for their support in jointly conducting enterprise energy and carbon data disclosure research.

We would also like to thank the following individuals for their contributions to this report: Li Derong, Xiang Qiongxuan, and Yang Zhiwei.

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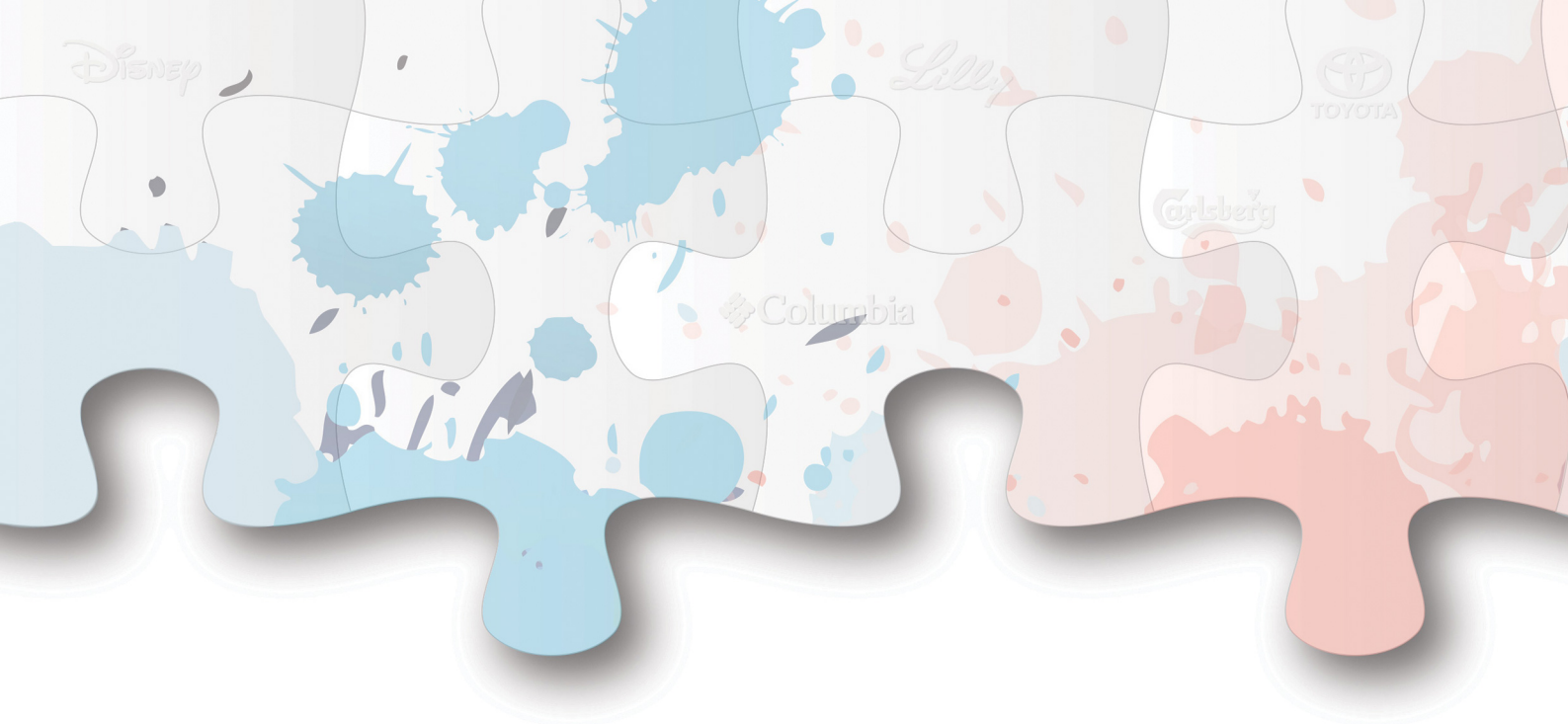
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## Acknowledgements

Many thanks to SEE foundation for their financial support.



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