



Supply Chain Transparency

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Sustainable
Supply Chains

In the headlines

South China Morning Post

US-China relations: forced labour to keep pressure on Chinese textile firms as American firms cut orders

New Link Traces Beef From Amazon Rainforest to Grocery Stores

SUPPLYCHAINBRAIN
ONE FORUM • ONE FOCUS • MANY MINDS



**Supply chain visibility boosts consumer
trust, and even sales**

Current and Emerging Regulation



FRANCE Duty of Vigilance Law

AUSTRIA Child and forced labour due diligence bill
Menschenrechte brauchen Gesetze campaign

FINLAND Government commitment
Civil society joint call

GERMANY Government commitment
Lieferkettengesetz campaign

LUXEMBOURG Government commitment
Initiative pour un devoir de vigilance campaign

NETHERLANDS Child labour due diligence law
ChristenUnie law proposal
Initiatief Duurzaam en Verantwoord Ondernemen campaign

NORWAY Ethics Information Committee draft act
Norwegian Coalition for Responsible Business

BELGIUM Civil society joint call

DENMARK Civil society joint call

IRELAND Civil society joint call

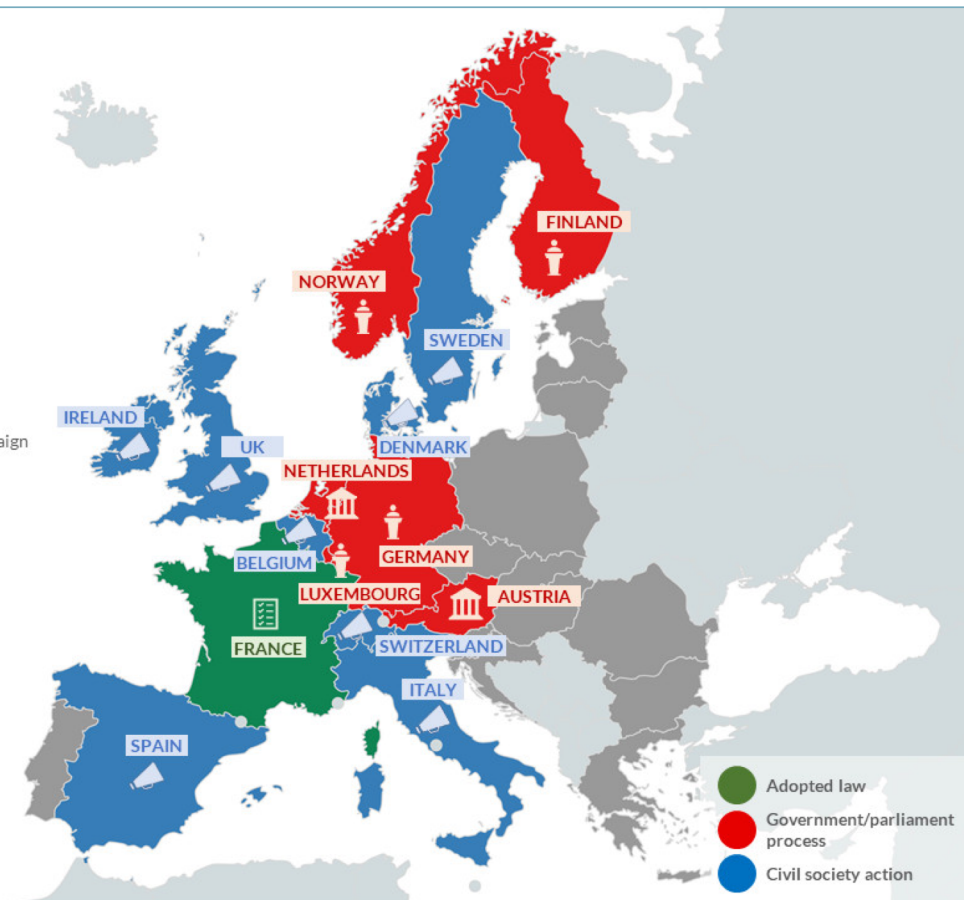
ITALY Civil society joint call

SPAIN Civil society joint call

SWEDEN *Visa handlingskraft* campaign

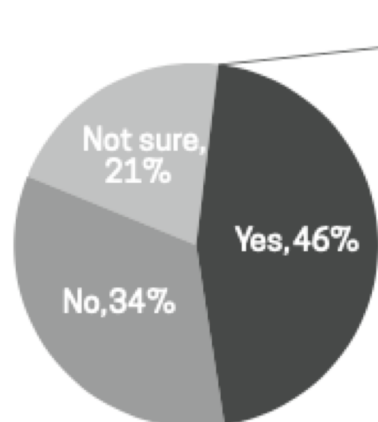
SWITZERLAND Civil society joint call

UK Civil society joint call

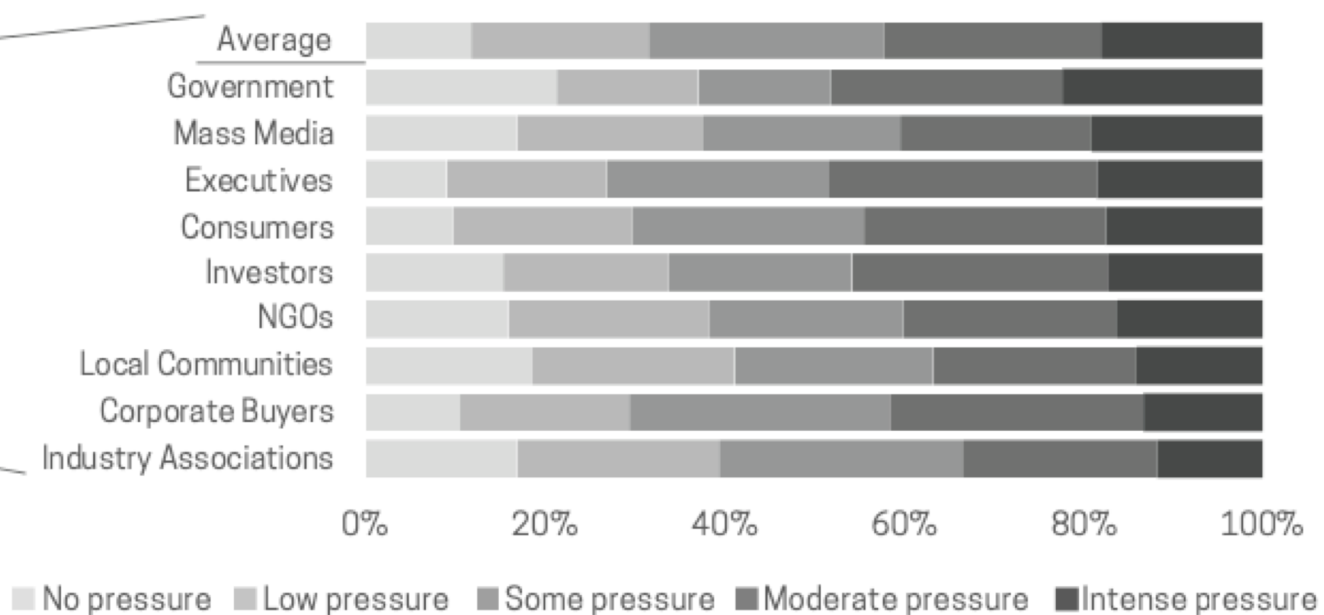


The Pressure to Act

Are you receiving pressure to adopt supply chain sustainability practices?



From where are you receiving pressure to adopt supply chain sustainability practices?



Definition of Transparency

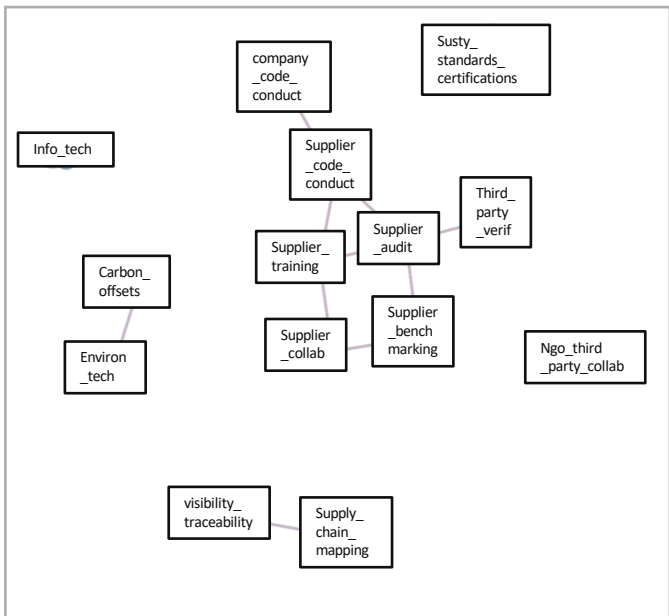
Transparency consists of two parts:

- **Visibility:** Accurately identifying and collecting data from all links in your supply chain.
- **Disclosure:** Communicating that information, both internally and externally, at the level of detail required or desired.

Bateman & Bonanni 2019

Practice Groupings (PRELIMINARY RESULTS)

Connected components of graph with adjacency matrix B grouped together



Group 1: Supplier Development

- Supplier code of conduct
- Supplier audit
- Supplier benchmarking
- Third party verification
- Supplier training
- Supplier collaboration

Group 2: High Viz

- Supply chain mapping
- Visibility and traceability

Group 3: Env. Impact Reduction

- Environmental technologies
- Carbon offsets

Independent Practices

- Sustainability standards and certificates
- NGO/3rd party collab
- Information technologies

Supply Chain Visibility – Different Technologies

Capture & Translation

Transforming the physical data (location, time, temperature, status, etc.) into digital data

Examples: Barcodes, Scanners, RFID, Smartphone, Internet of Things

Transmission & Upload

Moving the digital data from a local source to global or cloud system and/or database

Milestone versus Real Time systems

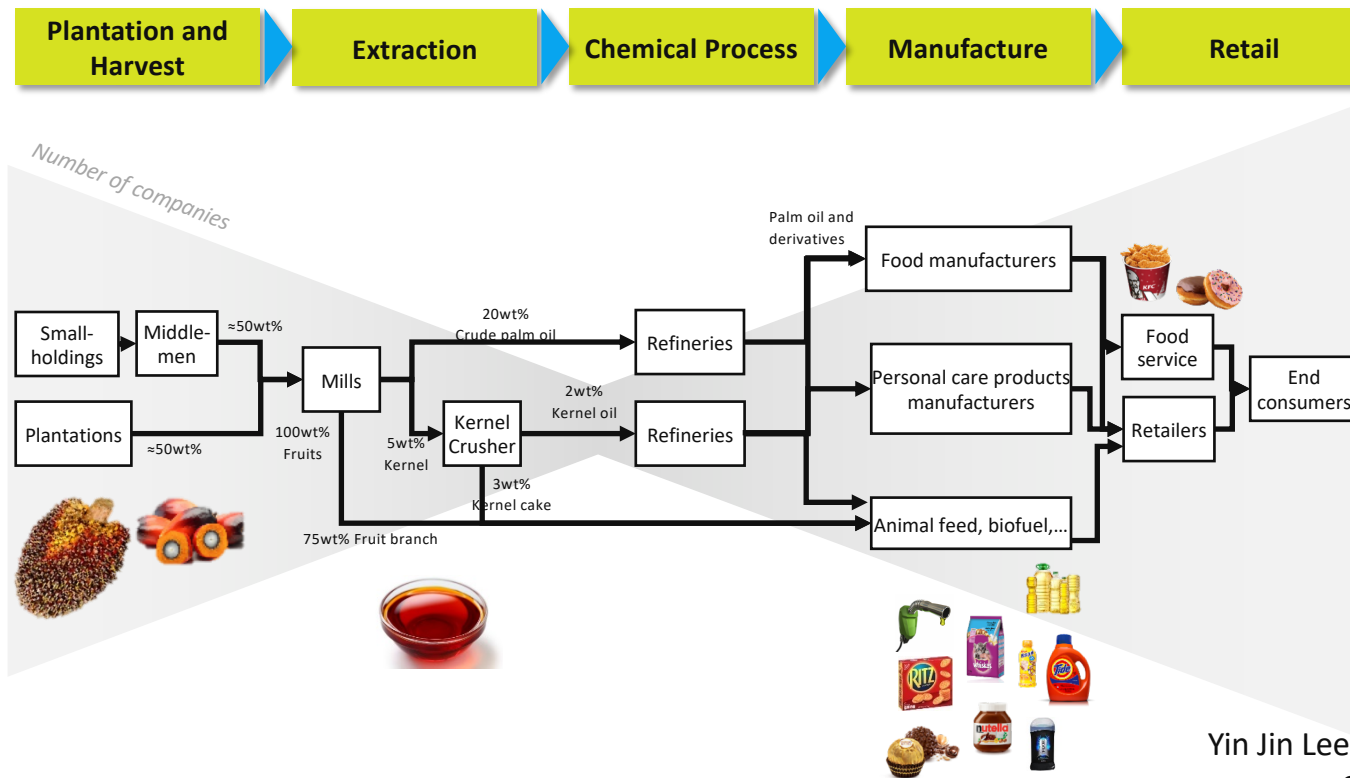
Examples: Electronic Data Interchange, Application Programming Interface, Global Positioning Systems

Access & Actionability

Providing access to and ability to conduct other actions using the data

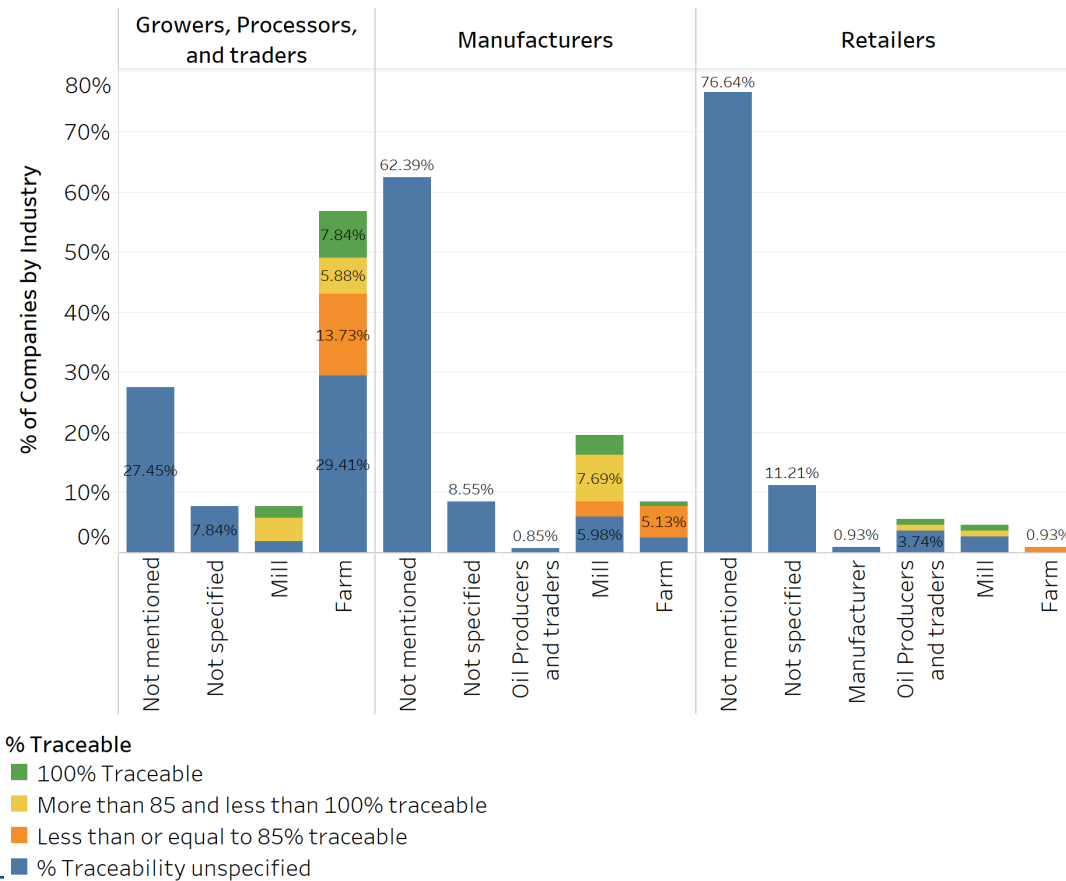
Examples: Supply Chain Execution Systems, Transportation Management Systems, Control Towers, Platforms, Blockchain

Palm Oil Supply Chain



Yin Jin Lee, MIT CTL, Doctoral Candidate




Disclosed traceability(PRELIMINARY RESULTS)



Yin Jin Lee, MIT CTL, Doctoral Candidate

Fashion Social Impact Disclosure



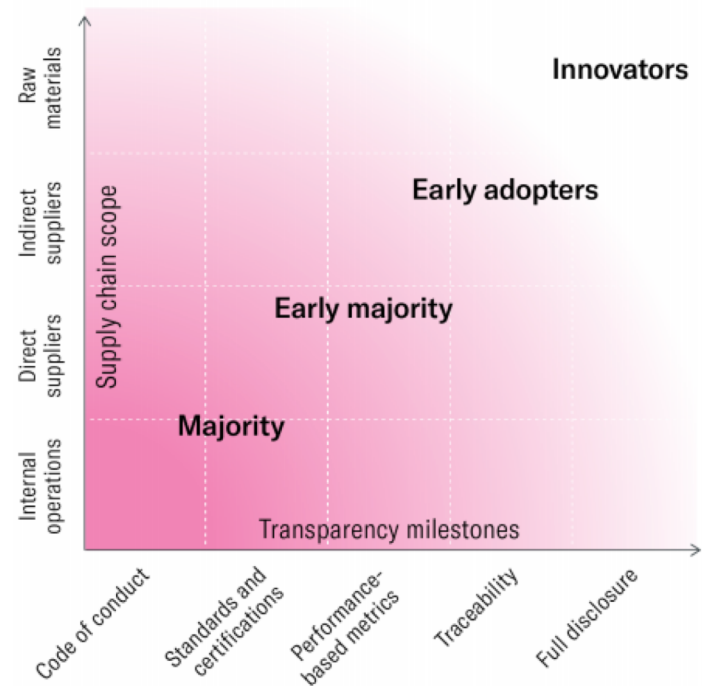
	Nationality	Size	Orientation	Suppliers published?	CoC published?	Audits published?	Full-cost Published?	Purchasing Practices Published?
	Sweden	100k	Trend	✓	✓	✓	✗	✓
 BURBERRY	UK	10k	Neutral	✗	✓	✗	✗	✓
	USA	100	Sustainability	✓	✓	✗	✓	✗

Denis Bozic, MIT TPP Masters

Supply Chain Transparency

How Transparent Is Your Supply Chain?

Transparency can be measured along two dimensions: supply chain scope (the depth of your interaction in the supply chain) and milestones on the path to complete transparency. Most companies are at the majority or early majority stages.



Source: Alexis Bateman and Leonardo Bonanni



Bateman & Bonanni 2019

Transparency becoming mainstream



FIND



SCAN



WATCH



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Amazon Supplier List

Amazon is strongly committed to conducting its business in a lawful and ethical manner, including engaging with suppliers that respect human rights, provide safe and inclusive workplaces, and promote a sustainable future. We engage with suppliers that are committed to these same principles. Our global teams work closely with suppliers to communicate our standards, and help suppliers build their capacity to provide safe and respectful working environments.

SITE	ADDRESS	CITY	STATE/REGION	COUNTRY
3Q Vina	8 An Duong Vuong Street, Ward 16, District 8	Ho Chi Minh	Ho Chi Minh City	Vietnam
A Mount Inc.	No. 65, Dongshing Street, Shulin District	New Taipei City	Taipei	Taiwan
A. R. Industries	Mauza Rampur Jattan, Dhakwala Mogrand, Tehsil Nahian, District	Kala Amb	Himachal Pradesh	India
AAC Technologies Holdings Inc. (Shenzhen)	No. 1, Chengxin Road, Baxing Ind. Park, Longgang District	Shenzhen	Guangdong	China
Asilly Opto-Electronics Technology Co., Ltd.	4F, No.31, Keya Rd., Daya Dist.	Taichung City	Taichung	Taiwan
ASLUC Inc (Ats)	58-2, Aza-Toki, Omagari-machi	Daisen-shi	Akita	Japan
Aditel Electronic (Dong Guan) Co., Ltd.	No.17-2B, (Hong Yeh Rd.), Hong Yeh Industrial District, Tang Xia Town	Dongguan	Guangdong	China
Azco Brands Booneville Mississippi	300 Quarter Avenue	Booneville	Mississippi	United States
Aze Fashion (Shenzhen) Co. Ltd	3rd Floor, Mingzhihai Complex Building, Zhou Shi Road, Shiyen, Baoan Dist	Shenzhen	Guangdong	China
Azobuc Innovation (Huizhou) Co., Ltd	Xiangshuhe Industrial Area, Dayawan Development District	Huizhou	Guangdong	China
Aerox Technologies Co., Ltd	No. 2 Ximen Road, Ximen Village, Changan Town	Dongguan	Guangdong	China
Athoz Textile Industries (Pvt), Ltd.	Lot No. Le-1/A, Block 22, Federal B Area	Karachi	Sindh	Pakistan
Agape Package Manufacturing (Shanghai) Ltd.	B1 Building, Donghai Industrial Park Songjiang Export Process Zone (B)	Shanghai	Shanghai	China
AOC Kansai (Tokazago)	5-6-1, Umei	Tokazago	Hyogo	Japan
Ajunt Tex	D.No.5691, St.No.112, Palladam Road, Arudapuram	Tirupur	Tamil Nadu	India
Ath Eco Apparels Ltd.	495, Balitha, Shahbakhaw, Channai	Dhaka	Dhaka	Bangladesh
Alliance Rubber Company	210 Carpenter Dam Road	Hot Springs	Arkansas	United States
Almed Medical Products Co., Ltd	No. 76, You Yi Road, Majidian Town Zhijiang	Yichang	Hubei	China

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Thank you! For more info:

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