

IFY 2024

WORLD SURVEY
ON
TEXTILES & NONWOVENS

Table of Contents

	Page
1. Foreword and Summary	10
1.1 Foreword	10
1.2 Executive Summary	13
1.3 List of Sources	14
1.4 Contributions from Industry Experts	15
1.5 Companies in TFY 2024	16
2. Summary	23
2.1 Textile Value Chain 2023 at a Glance	23
2.2 World Fiber and Spunlaid Market 2023	24
2.3 Revisions for 2022	25
2.4 Polyester Feedstocks	26
2.5 Manmade Fibers	27
2.6 Staple Fibers	29
2.7 Filament Yarns	30
2.8 Filament and Spun Yarns	31
2.9 Nonwovens	33
2.10 Textile and Apparel Trade 2023	34
2.11 Textile and Apparel Trade Q1 2024	35
2.12 Fiber Supply 1900 - 2030	36
3. Upstream Feedstock Industry	37
3.1 Cotton Cultivation	37
3.2 Sheep Farming	45
3.3 Dissolving Pulp 2005 - 2027	48
3.4 Petrochemicals	51
3.4.1 Paraxylene (PX) 2005 - 2027	52
3.4.2 Purified Terephthalic Acid (PTA) 2005 - 2027	53
3.4.3 Dimethyl Terephthalate (DMT) 2005 - 2027	54
3.4.4 Mono Ethylene Glycol (MEG) 2005 - 2027	55
3.4.5 Caprolactam (CPL) 2005 - 2027	56
Sustainable Textiles - a long way to go	57
Textile Recycling Landscape Europe	60

Table of Contents

	Page
4. Staple Fibers	67
4.1 World Staple Fibers	67
4.2 Natural Fibers	70
4.2.1 Cotton	71
4.2.2 Wool	74
4.2.3 Other Natural Fibers	80
4.3 Wood-based Cellulosic Fibers	84
4.3.1 Viscose Fibers	86
4.3.2 Modal Fibers	89
4.3.3 Lyocell Fibers	90
4.3.4 Textile Recycling and New Fiber Technologies	92
4.3.5 Acetate Tow	93
4.4 Synthetic Staple Fibers	96
4.4.1 Polyester Staple Fibers	98
4.4.2 Polypropylene Staple Fibers	100
4.4.3 Acrylic Staple Fibers	104
4.4.4 Polyamide Staple Fibers	105
4.5 Staple Fiber Price Comparison	106
5. Yarns	111
5.1 World Filament and Spun Yarn	111
5.2 Filament Yarn	112
5.2.1 Polyester Filament	114
5.2.2 Polyamide Filament	117
5.2.3 Polypropylene Filament	120
5.2.4 Wood-based Cellulosic Filament	122
5.3 Spun and Cotton Yarn	123
5.4 Filament and Spun Yarn Price Comparison	124
6. Other Manmade Fibers	125
6.1 General Overview	125
6.2 Aramid Fibers	126
6.3 Carbon Fibers	128
6.4 Spandex Fibers	133

Table of Contents

	Page
7. Nonwovens and Unspun Applications	140
7.1 General Overview	140
7.2 Trade in Dry- and Spunlaid	141
7.3 Major Investments	143
7.4 Polymer-based	152
7.5 Drylaid	161
7.6 Airlaid	163
7.7 Wetlaid	164
8. Major Countries and Regions in Textiles and Clothing Business	165
8.1 Australia	170
8.2 Bangladesh	175
8.3 Brazil	185
8.4 Cambodia	192
8.5 PR China	200
8.6 European Union EU(27)	215
8.7 India	230
8.8 Indonesia	242
8.9 Japan	250
8.10 Korea	258
8.11 Malaysia	268
8.12 Mexico	275
8.13 Myanmar	281
8.14 Pakistan	285
8.15 Sri Lanka	296
8.16 Taiwan	302
8.17 Thailand	309
8.18 Türkiye	317
8.19 United States	328
8.20 Vietnam	344
9. Outlook	353
9.1 Short-Term Expectation	353
9.2 Fiber Supply 1900 - 2030	356

Table of Contents

	Page
Statistical Appendix	357
A. Supply and Demand	
A.1 World Fiber Market: Supply	360
A.2 World Fiber Volume Entering Processing Chain	361
A.3 World Fiber Volume Entering Processing Chain in kg / head	362
A.4 World Fiber Market (Classic View)	363
A.5 Fiber Type Dynamics in Supply	364
A.6 Natural and Manmade Fiber Processing Use	365
A.7 Natural Fibers Production	366
A.8 Natural Fibers Consumption	367
A.9 Cotton Production and Use	368
A.10 Production of Bast Fibers	369
A.11 Production of Other Natural Fibers	370
A.12 Staple Fibers Production	371
A.13 Production of Manmade Fibers	372
A.14 Production of Synthetic Fibers	373
A.15 Production of Cellulosic Fibers	374
A.16 Share of Major Fiber Types by Production	375
A.17 Staple Fiber Competition by Production	376
A.18 Main Staple Fiber Production	377
A.19 Fiber Supply 1900 - 2030	378
B. Manmade Fibers	
B.1 Production of Manmade Fibers by Major Country	379
B.2 Production of Manmade Fibers by Material	380
B.3 Top 3 Manmade Fiber Producing Countries	381
B.4 Polyester Fiber Industry 2022/23	382
B.5 Polyamide Filament Industry 2022/23	383
B.6 Manmade Staple Fiber Industry 2022/23	384
B.7 Filament Yarn Production	385
B.8 Synthetic Staple Fiber Production	386
B.9 Cellulosic Staple Fiber Production	387

Table of Contents

	Page
Statistical Appendix	
C. Yarns and Fibers	
C.1 Global Yarn Production	388
C.2 Dynamics in Yarn Production	389
C.3 History of Yarn Production	390
C.4 Filament Yarn Production by End-Use	391
C.5 Top 10 Cotton Yarn Countries	392
C.6 Top 10 Filament Yarn Countries	393
C.7 Top 10 Staple Fiber Countries	394
C.8 Top 10 Natural Staple Fiber Countries	395
C.9 Top 10 Manmade Staple Fiber Countries	396
C.10 Top 10 Staple Fiber Trading Countries	397
C.11 Top 10 Yarn Trading Countries	398
C.12 Top 10 Sewing Thread Trading Countries	399
D. Textile and Clothing Trade	
D.1 Major Textile & Clothing Trading Countries - Americas	400
D.2 Major Textile & Clothing Trading Countries - European Union	401
D.3 Share of Non-EU Textile & Clothing Trade	402
D.4 Major Textile & Clothing Trading Countries - EU-Summary and Non-EU Countries	403
D.5 Major Textile & Clothing Trading Countries - Asia	404
D.6 Major Textile & Clothing Trading Countries - Rest of the World	405
D.7 Major Exporters in Textiles & Clothing	406
D.8 Major Importers in Textiles & Clothing	407
D.9 Trade Balances in Textiles & Clothing	408
Other Statistics	
E.1 Regional Production of Passenger Cars	409
E.2 Regional Production of Light Commercial Vehicles	410
E.3 Tire Projects - Summary	411
E.4 Tire Projects by Country	412
References to article from RWTH Aachen University & Technische Hochschule Augsburg	419

1.2 Executive Summary

The year 2023 has not seen a sustainable market recovery and the economic outlook remains deeply uncertain. Geopolitical tensions and instability remain the crucial forces to be reckoned with. A number of risks remain for the global economy including the persistence of elevated inflation which is mostly exceeding the targets of central banks. Thus, central banks will not rush to cut interest rates and Federal Reserve Bank kept its key rate at a two-decade high in May. The World Economic Outlook by International Monetary Fund projects for 2024 a global growth unchanged to prior year and forecast of real GDP growth rates are to remain tolerably stable in the coming years.

World supply recovered last year thanks to manmade fibers. The overall growth rate in the upstream business clearly remained below century average. The only category succeeding to grow at above-average rate was wood-based cellulosic fibers, pushed by stunning expansion of lyocell fibers, to mark a new all-time high. Synthetic fibers recorded slower growth, essentially driven by polyester and small-scale types such as aramid, carbon and spandex fibers. The volume of natural fibers witnessed improvements across the board with the exception of large-scale cotton. Manufacturing of spunlaid suffered from its third straight decrease which still is the consequence of outsized demand in the first year of pandemic when supply skyrocketed by 34%.

The fiber market returned to its longtime performance with faster dynamics in filament yarns than staple fibers. Filaments continued to hold the majority in the third consecutive year, slight improving its share. They are able to immediately respond to changes in market demand other than natural fibers that still account for majority of materials for subsequent secondary spinning and nonwovens production.

High energy costs, shortage of workers and Asian import pressure led to several company closures and capacity adjustments in the Western hemisphere. At the same time, reduced demand of apparel and textile products as consumers cut spendings on non-essentials in favor of traveling, services and entertainment resulted in a worsening of operating rates in most parts of the Asian region.

Official trade flows were depressed and imports into the vast majority of developed countries turned negative while just a very few major exporting nations such as Bangladesh and Mexico succeeded to lift their shipments.

The report contains multiple investments in recycling facilities across the globe which are urgently required when we acknowledge the negative impact on human health and environment from production, use and disposal of clothing made from synthetic fabrics. Governments and manufacturers strive for sustainability but the awareness for the impact from a simple piece of garment apparently has not yet broadly arrived at consumers. How else can we explain booming sales for the fast fashion industry? The predominant buying factor still appears to be the price at the point of sale instead of sustainability. A changing mindset is inevitable amidst ongoing economic uncertainties and risks to make synthetics a future-proof fiber under today's policy.

We are short of alternatives to replace almost 55 million tonnes of textile filaments at present. Natural fibers will simply not find enough crop area. The staggering upward trend of regenerated cellulosic fibers, offering outstanding wearing properties, continues to be in full swing but volumes are also not yet sufficient.

1.4 Contributions from Industry Experts



Michael Carus
Founder and CEO
nova-Institute
Hürth, Germany
<https://nova-institute.eu>



Stefan Schonauer
Research Assistant
Institut für Textiltechnik (ITA)
RWTH Aachen University, Germany
www.ita.rwth-aachen.de



Duan Xiaoping
Vice President
China National Textile and Apparel
Council (CNTAC)
Beijing, PR China
www.ctei.cn



Isak Staats
Chair IWTO Market Intelligence
International Wool Textile Organisa-
tion (IWTO)
Port Elizabeth, South Africa
www.iwto.org



Dr. Florian Heubrandner
Executive Vice President Commercial
Textiles
Lenzing AG
Lenzing, Austria
www.lenzing.com



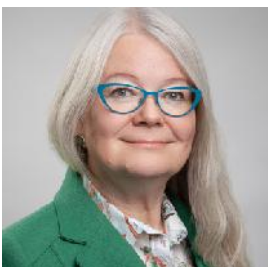
Jan Thiel
Researcher
ITA – Institut für Textiltechnik der
RWTH Aachen University
Aachen, Germany
www.ita.rwth-aachen.de



Li Guimei
President
China Nonwovens and Industrial Texti-
les Association (CNITA)
Beijing, PR China
www.cnita.org.cn



Dalena White
Secretary General
International Wool Textile Organisa-
tion (IWTO)
Brussels, Belgium
www.iwto.org



Dr. Asta Partanen
Senior Market Expert Biocomposites,
Wood and Cellulose-based Materials
nova-Institute
Hürth, Germany
<https://nova-institute.eu>



Dr. Olivier Zieschank
Director
International Textile Manufacturers
Federation (ITMF)
Zurich, Switzerland
www.itmf.org



Lorena Ruiz
Economist
International Cotton Advisory Com-
mittee (ICAC)
Washington, DC, United States
www.icac.org

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

1888 Mills	Asti Knitwear Co. Ltd.
3M	Astrabel
Adidas	Audi
ADVANSA Manufacturing GmbH	Austrian Alpla
Adventure Bag & Luggage	Autoliv
Ahlstrom	Autoneum
Ahlstrom-Munksjö	Avgol
Airbus	B.I.G. Yarns
AJ Nonwovens	Badsha Group
Akra Filament	Baftineh
AKSA	Baling Petrochemical
ALBA Group Asia	Balkrishna Industries Ltd.
Albaad Group	Bangladesh Boyang Textile
Albany International	BASF
Albis	BASF Venture Capital
Alkegen	Bast Fibre Technologies
Allmed Medical Products	Bayegan Group
Alpha Foam Ltd	Baystar
Altri Group	Bayteks Textil Industry
Alujain	Beijing Automotive Industry Corp. (BAIC)
AMANN India	Berry Global
Ambercycle	Beswin Fashion (Cambodia) Co. Ltd.
American Elite Personal Protective Equipment	BEXIMCO
Andritz	Bharat Petroleum Corp Ltd (BPCL)
Ansell	Billion Industrial Holdings
Anyu (Cambodia) Bags Co. Ltd.	Biotrend Energy
Apex Mills	Birla Cellulose
Apollo Tyres	Birla Group
Aquafil	Black Arrow Tire Co.
Arabia's Al Sahn Al Usud for Tires	BMW
Aramco	Boeing
Arauco	Bolito Garment Co. Ltd.
Armbrust American	Borealis
Aroma Success Garment Co.	Bracell
Artiverse (Cambodia) Co. Ltd.	Braskem
Arvind Ltd	Bridgestone Corp.
Asahi Kasei	Brilen
Asahi Kasei Spunbond (Thailand)	British American Tobacco (BAT)
Ascend Performance Materials	BRP
Asia Pacific Fibers	BYD
Asia Pacific Rayon	Cambodian Xin Huang Ming Garment Co. Ltd.
Asia Pulp & Paper (APP)	CAMCE/Tijan Petroleum
Asia Symbol (Guangdong) Paper	Capro
AstenJohnson	Carbios

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

Carbon Fiber Recycling	DePoly
Carbon Fibre Grand Challenge	Deshbandhu Group
Carolina Nonwovens	Dishang Ruihuashang (Cambodia) Garments Co. Ltd.
Cart Tire Co. Ltd.	Domtar
Ceat Tyres	Don & Low
Celanese	Dongfang Knitting (BD)
Century Enka Ltd (CEL)	DowAksa
Cerdia	Dralon
Changsheng Technology	Dun Tai Garment (Cambodia) Co. Ltd.
Changzhou National Hi-Tech District	Dunlop Aircraft Tyres
Cheng Shin Rubber	DuPont
Cherish Industrial (Cambodia) Co. Ltd.	Durio PPE
Cherry Button	Duytan Palstic Recycling
Chery	Dysin Advanced Material
Chevron Phillips	Eagle Nonwovens
China Coal Shaanxi Energy & Chemical Group	Eastman
China Petrochem. Develop. Corp. (CPDC)	Ecohelp SRL
China Pingmei Shenma Group	Elite Enterprise (Cambodia) Co. Ltd.
China Resources Yantai Nylon Co.	Enka
China Tianying	EPIC Group
CHT	Eshana Nonwoven Fabrics
CHTC Jiahua Nonwoven Co. Ltd.	Esquire
CNC Fitesa	Essity
CNOOC Ningbo Daxie	Ester Industries Ltd.
Cobes Health Care (Hefei) Co.	Evergreen Sporting Goods (Cambodia) Co. Ltd.
Cobes Industries	Everich Outdoor Products (Cambodia) Co.
Columbia Sportswear	ExxonMobil
Commercial Aircraft Corporation of China (COMAC)	Fairmat
Continental	Far Eastern New Century (FENC)
Continental AG	Far Eastern Polytex Vietnam
Cooper Tire & Rubber	Fenix Garment
Cordenka	Fiat
Corpus Christi Polymers	Fiber Industries
Cosmo Specialty Fibers (Cosmo)	Fibertex
CPAK Garment (Cambodia) Co. Ltd.	Fibertex Nonwovens
Culp Inc.	Fiberweb India
Daicel	First Quality
Dairen Chemical Corp.	Fitesa
Dalian Hualun Nonwoven Equipment	Flint Hills
Dan-Web Machinery	Ford
Darn Tough Vermont	Formosa
Dazhengxuan (Cambodia) Industrial Co Ltd	Foshan Nanhai Beautiful Nonwoven Co. Ltd.
DBL Group	Foss Floors
Debonair Group	Foss Performance Materials

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

Foton Packaging Product Co Ltd	Hayat
Freudenberg & Co. KG	Heartland PP
Freudenberg Far Eastern Spunweb	HeiQ AeonIQ
Freudenberg Performance Materials	Hella Infra Market Private
Fujian Billion Petrochemicals	Helsa Icon Bangladesh
Fujian Energy and Petrochemical Group (FEPG)	Hen Yang (Cambodia) Apparel Manufacturing Co. Ltd.
Fujiko	Henan Shenma Xianglong Chemical
FullCare Medical	Hengli Group
Funday Garment Co.	Hengli Petrochemical (Huizhou)
Fuwei'er (Zhuhai) Composite Material	Hengst Filtration
Garden Silk Mills	Hexcel
Gatron Group	HIK-91
General Intelligence Co	Hollingsworth & Vose (H&V)
General Motors	Honda Motor
General Nonwovens	Honeywell
Genox Recycling	Honggang Petrochemical
Georgia-Pacific (GP)	Huafon Spandex
GHCL Textiles	Huaheng Energy Technology
Gildan Activewear	Hubei Golden Ring
Ginni Filaments	Huiyao Yaoxing Plastic Packaging Products (Cambodia)
Giti Tire	Huizhou Refining & Chemical
Glatfelter	HW Produktions GmbH
Glen Raven	Hyosung
Global Nonwovens	Hyosung Advanced Materials
Golden Island Garments (Cambodia) Co.	Hyosung Vina Core Materials
Goodyear Tire & Rubber	Hyundai
GP Cellulose	Hyundai Chemical
Gr3n	Hyundai Engineering
Grasim Industries	Hyundai Motor
Great Zhenxin Garment Co. Ltd.	Hyundai Oilbank
Grupa Azoty	Idemitsu Kosan
GS Caltex	IKEA
GTR srl	Image Garments (Cambodia) Co. Ltd.
Guangdong Genox LyondellBasell New Material	Imperial Tobacco (IMT)
Guangdong Hengan Paper	Indian Oil Corporation Ltd. (IOCL)
Guangdong Jieyang	Inditex
Guizhou Tyre	Indorama Ventures (IVL)
Gulsan	Indorama Yarns
H&M	INEOS Aromatics
Haldia Petrochemicals (HPL)	INEOS Olefins
HanesBrands	Infinited Fiber
Hanil Synthetic Fiber	Innovatec
Hankook Tire	INPEX
Haolida (Cambodia) Co. Ltd.	Intecsa Industrial

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

Integra Plastics AD	Lotte Chemical
Inter Pipeline	Lotus Teknik
Interloop	Lounais-Suomen Jätehuolto (LSJH)
INVISTA	LSCS Invest
Japan Tobacco Group of Companies (JTI)	LYCRA Company
Jia Tong Energy	Lydall
Jiangsu Chengtai Vehicle	Lyndhurst
Jiangsu General Science Technology Co. Ltd.	LyondellBasell Industries
JiaTong Energy	Macias Textil
Jilin Chemical Fiber Group (JCFG)	MAE
Jin Long Quan (Cambodia) Co.	Makalot Industrial
Jindal Advanced Materials	Maliha Poly Tex
JM Fabrics	Manjushree Spntek
Jofo Group	Mann+Hummel
Jofo Wuxi	Maruha Nichiro
Johns Manville	Masdar
Jubail United Petrochemical Co. (JUPC)	Master Plast
Juhai Baoshun (Cambodia) Co. Ltd.	Maxwill Garment (Cambodia) Co. Ltd.
Jungkwang Evergreen Garment Co.	McThree Carpets
Justin Allen (Cambodia) Garment Manufacturing Co. Ltd.	Meisheng Group
Kangfa (Cambodia) Garment Technology Co. Ltd.	MELTBLO
Kao Corp.	Menature Outdoor (Cambodia) Co. Ltd.
Kara Holding	Mepol Group
Kimberly-Clark (K-C)	Merinos Hali Sanayi ve Ticaret
Kingdom Tyres	Merkas Textil
Kitex Group	Metsä Group
KJ Apparel (Cambodia) Co. Ltd.	Metsä Tissue
Köksan PET ve Plastik Ambalaj	Michelin Group
Kolmar Group	Microfiber
Kolon Industries	Microwave Chemical
Kordsa	Milkay Teknik Tekstil
Kruger Products	Milliken
Kumho Tire	Mitsubishi
Kumho Tire Co.	Mitsubishi Chemical
Kunbo Style Apparel Co. Ltd.	Mitsui Chemicals
Kuraray	Mitsui Chemicals Asahi Life Materials Co.
Latco America Polymers	Modern Syntex
LD Carbon	Mogul
Lenzing Group	Mohan Spintex India
LG Chem	Mohawk
Linglong Tire Co. Ltd	Mondi
Long March Garment Co. Ltd.	MRF Ltd.
Long Son Petrochemicals	Mumanu Polyester Industries
Loop Industries	Nan Tong Tong Sheng Footwear Co. Ltd.

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

Nan Ya Plastics	Philip Morris International (PMI)
National Spinning	Phoenix Technologies International
NatureWorks	Pioneer Embroideries
Natuopera	Pirelli & C. S.p.A.
NAUE Asia	Poleestar (Cambodia) Garment Co. Ltd.
Neenah	Polymers Europe
Neptune Holding Co.	PPE Solutions
New HM Knitting Clothing (Cambodia)	Precision Garment & Bag Industries Co.
New Target Footwear (Cambodia) Co	Preclo (Cambodia) Co. Ltd.
Newbustar (Cambodia) Tire Co Ltd	Predo Health Products
Newsight Garment Co. Ltd.	Prevented Ocean Plastic Southeast Asia (POPSEA)
Nexam Chemical	Principle Business Enterprises (PBE)
Nexen Tire	Procter & Gamble
Nike	PTT Global Chemical
NILIT	PureCycle Technologies
Ningxia Ningdong Taihe New Materials	PurFi Global
Nitto Seimo	Pyramids Tires
Niuent (Cambodia) Co. Ltd.	Qi Heng Xin Factory Co.
Nokian Tyres	Qingdao Doublestar Group
Nonwovens Iberica	Qingdao Fullrun Tyre Corp. Ltd.
Nordic Bioproducts Group	Qingdao Zhongmian (Cambodia) Knitting Co. Ltd.
Nouvelles Fibres Textiles	Qinghai Damei Coal Industrial Co.
Novafiber	Quimicolor
NOWOtex	Quince & Co.
Nurel	Radici
Obeetee Textiles	Re:NewCell
OMV	Reliance Industries Limited (RIL)
Optima Garment (Cambodia) Co. Ltd.	Reliance Polyester Ltd
Origin Materials	Repsol
Owens Corning	Revalyu Resources
Oxxynova	RGE Group
OZ Health Plus	Rialti S.p.A.
Pacific Jeans	Rodepa Vastgoed B.V.
Panda Biotech	RSWM Ltd.
Parkdale Mills	Rudolf GmbH
Pashupati	SABIC
Pengjiao Industrial Co. Ltd.	Sae-A Group
Performance BioFilaments Inc.	Sae-A Trading
Perlon	Safilin
Petkim Petrokimya Holding	Sage Automotive Interiors
Petlas	SAIC Motor
PetStar	Sailun Group
Peugeot	Sangam India
PF Nonwovens	Sanyo Chemical

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

SASA	SSCA Garment Co Ltd
Sateri	SSH CB Sustainable Fashion Co. Ltd.
Saudi German Company for Nonwoven Products	Standford Textile Industries Co. Ltd.
Scalter	Stavian Quang Yen Petrochemical JSC
Schwarzwälder Textil-Werke Heinrich Kautzmann	Stein Fibers
Sentury Tire	Stellantis
Sentury Tire (Spain) Co.	STEP Polymers SPA
Service Long March Tyres (PVT) Ltd	Stiphout Industries B.V.
Sfilacciatura Negro	Stora Enso
Shandong Haohua Tire	Suez
Shandong Jinyu Tire	Sumitomo Rubber
Shandong Linglong Tire Co. Ltd	Sundly Clothing International (Cambodia) Co. Ltd.
Shandong Xingdi New Material Co Ltd	Sunny Jet Hosiery (Cambodia) Co. Ltd.
Shanghai Huayi (Group) Co.	Sunrex Industry (Mitsui)
Shawmut Corp.	Sunrun (Cambodia) Garments Factory Co. Ltd.
SHCA Garment (Cambodia) Co. Ltd.	Suominen
SHEIN	Super Knitting (Cambodia) Co Ltd
Shell Chemicals	Suzano
Shenghong Refinery	Suzhou U-Air Environmental Technology
Shenma Industry Co	SVZ Printing & Packaging Co. Ltd.
Shubhalakshmi Polyesters Ltd (SPL)	Swan Fiber
Shubhlaxmi Polytex Ltd (SPTex)	Synpet
Shuye	Taekwang Industry
SINAATEC Spa	Taisheng (Bangladesh) Webbing
Sinochem International	Taral International Co Ltd
Sinopec	Team Group
Sinopec Ningbo Zhenhai Refining & Chemical	Tearfil
Sinopec Shanghai Petrochemical	Tegra
SINOPEC Yizheng	Teijin Frontier
Sirius Gear Outdoor Products (Cambodia) Co. Ltd.	Teijin Group
SK Chemicals	Teijin Polyester (Thailand)
SK Geo Centric (SKGC)	Teknomelt Teknik Mensucat
Sky Best Fashion Co. Ltd.	Tesla
SOCAR	Texhong
Södra	Tex-Tech Industries
Softbond Nonwovens	Texygen Textile
Sojitz	Thai Shinkong Industry Corp. (TSIC)
Solvay	Thrace Group
Spinnova	Tianchen Qixiang
SpinTech Brasil Ltda	Tiens Textile (Cambodia) Co.
SpinTech USA	Tin Thanh Group Americas
Spunchem	Titan International
Spunweb	Tongkun
Sritex	Toray Advanced Materials Korea Inc (TAK)

1.5 Companies in TFY 2024

TFY 2024 bases largely on textile and related associations, a global network of experts and more than 600 company news.

Toray Carbon Fibers Europe	Xianglu Petrochemical
Toray Composite Materials America	Xin Shun Jie (Cambodia) Leather Co.
Toray Industries Inc.	Xin Sunn Long (Cambodia) Garment Co. Ltd.
Toray Industries (India) Private Ltd.	Xinfengming
Toray Polytech (Foshan) Co. Ltd. (TPF)	Xinjiang Korla Zhongtai Petrochemical
Toray Polytech (Nantong) Co. Ltd. (TPN)	Xinjiang Yuxin New Materials
Total Corbion	Xinjiang Zhongtai Henghui Medical & Health Material Co
TotalEnergies	Xu Wei Garment (Cambodia) Co Ltd
Toyo Tire Corp.	Yanpai Filtration Technology
Toyobo Indorama Advanced Fibers	YF Sinosky Industrial (Cambodia) Co. Ltd.
Toyota	YiSheng Hainan Petrochemical
TPG Rise Climate	Yokohama Rubber
TreeToTextile	Young ME Apparel (Cambodia) Co. Ltd.
Trelleborg Group	Youngone Corp.
Trevira	Yue Wing Cheong Manufactory Co.
Trimetro Garments India	Yuen Foong Yu
TVS Srichakra	Yun Sheng BD
TWE Group	Zaber & Zubair Fabrics
Tyre Recycling Solutions	ZF Group
Ube	Zhejiang Baling Hengyi Caprolactam
Unicharm	Zhejiang Hengyi
Union Industries	Zhejiang Kesilong Industry Co.
Uniqetex LLC	Zhongce Rubber Group
United Polymer Trading AG	Zhongfu Shenying Carbon Fiber
United Spinning and Dyeing	Zodo Tire Co.
Unitika Ltd.	Zoltek
Uno Minda	
UPA Healthcare Products	
Vargas Holding	
Vartega	
Vataset Teollisuus Oy	
Vent Dest Phnom Penh Clothing Co. Ltd.	
VietCycle	
VinFast	
Volkswagen (VW)	
Walmart	
Welspun India	
Windara International Co.	
Wolf PVG	
WP Sports (Cambodia) Co. Ltd.	
WPT Nonwovens Corp.	
X J X Industrial Co. Ltd.	
XDD Textile	
Xiamen YanJan New Material Co. Ltd.	