ORCINAR CASHION

A PUBLIC POLICY CASE FOR INNOVATION, JOBS, SUPPLY CHAIN PROTECTION, AND CONSUMER AND ECONOMIC EMPOWERMENT



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TERMS GLOSSARY

FASHION

Includes apparel, accessories, and footwear

REUSE

Includes the resale, rental, repair, and upcycling of fashion

TEXTILE RECYCLING

Converting textile waste into reusable raw materials for use in new product, like recycled textiles

UPCYCLING

Deconstructing used fashion, and reconstructing into new finished goods

DOWNCYCLING

Shredding textiles to a make a lower grade fiber, often for use for rags, insulation or upholstery filler

CIRCULAR BUSINESS MODELS

Businesses that reduce the use of new materials for production and extend the lifetime of existing products¹, particularly those that enable and participate in rental, resale, repair, upcycling, and recycling.

LINEAR BUSINESS MODELS

Businesses that rely on growth through a take-make-waste model; producing new products and materials through the use of virgin raw materials that will be disposed of at end of life.

1. A framework of circular business models for fashion and textiles: the role of business-model, technical, and social innovation; Sustainability: Science, Practice And Policy



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AMERICAN
CIRCULAR TEXTILES

EXECUTIVE SUMMARY.

American Circular Textiles Group (ACT) is a coalition of leading fashion organizations² who have recognized the urgent need to promote and support the domestic circular fashion industry through public policy education, with an emphasis on apparel and footwear reuse and recycling. Founded and led by Circular Services Group, as of April 2023 ACT's founding membership includes The RealReal, Rent the Runway, thredUP, Arrive, Fashionphile, Recurate, SuperCircle, and Thrilling; and we were recently joined by H&M, Debrand, and Reformation. ACT provides a uniquely collaborative space. We aspire to drive solutions that connect participating organizations in fashion's circular economy, and to provide the glue for a fragmented and competitive market that will only succeed through broad and collective efforts. Together, our goal is to facilitate the transition from a linear to a circular fashion economy. We aim to raise awareness of domestic circular fashion opportunities, and recommend and support responsible public policy solutions that transition fashion's pollutive linear business model into a more sustainable circular industry, turning environmental challenges into positive societal externalities.

In this paper, we describe the domestic policy opportunity to address fashion's pollution contributions through increased support of circular fashion models. We summarize fashion's environmental, financial, and health impacts on our communities, and explain how circular fashion presents a necessary and urgent improvement to the linear take-make-waste business model. We consider the benefits of increasing U.S. consumer demand for reuse, and further enabling businesses and individuals to participate in resale, while building markets that do not yet exist at scale, like textile recycling. Finally, we propose public policy that will support fashion circularity, and explain how it will protect U.S. supply chains, support economic competitiveness, enable job creation and empower consumers.

Through bipartisan advocacy and consumer awareness efforts that promulgate the benefits of circular fashion, our work aims to drive public policy measures that align with the waste hierarchy, where fashion reuse and recycling are more accessible and widespread than disposal. Just as public policy has supported renewable energy manufacturing supply chains and cleaner transportation deployment to protect our environment, added jobs to our economy, provided value to consumers, safeguarded our supply chains, and bolstered national competitiveness, ACT believes public policy can support circular fashion models to achieve similar benefits. The proposed public policy measures outlined in this paper are not intended to be prescriptive, but rather educational, suggesting levers that could support a transition to a circular fashion industry, and include (but are not limited to):

- a) circular fashion tax incentives for consumers and businesses;
- b) EPR for textiles;
- **c)** government fiscal support to enable widespread and accessible circular fashion solutions for Americans; and

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d) increased oversight over fashion waste pollution contributors.

WHAT ACT HOPES TO ACHIEVE.

The work of ACT is intended to influence and incite public policy action that accelerates circular and sustainable fashion practices and disincentivizes an exclusively linear fashion model. We support domestic efforts that: a) stimulate innovation, sustainable jobs, and economic empowerment; b) protect our domestic supply chains; c) offer both value and sustainability to consumers; d) can achieve scale; and/or e) prioritize the waste hierarchy, where reuse and recycling are prioritized and incineration and landfill are a last resort.

Our work is the future. It is youth-motivated and represents the priorities of a new base of voters, people, and leaders, including leadership of the organizations that ACT represents. Through key bipartisan public policy recommendations, our aim is to accelerate adoption of a circular fashion system which will enable economic productivity. After reviewing these materials, we encourage you to take the following actions:

Consumers	call	on	policy	makers	and	brands	to	support
	circi	ılarii	tv.					

Policy makers take heed and work to drive legislation that supports

the circular fashion industry;

Brands engage your leadership and consumer bases to

support a shift towards circular business models, with the help of a supportive policy framework;

Philanthropic and trade organizations

and other relevant stakeholders, we want to work in concert with you. Please feel inspired to join,

engage with, and support our mission.

For more information on ACT, please visit our website, https://www.americancirculartextiles.com, or follow along on LinkedIn or Twitter. We can also be reached via email at ACT@americancirculartextiles.com.

THE FASHION PROBLEM.

The apparel and footwear sector is one of the most pollutive and natural resource-intensive industries, contaminating our soil and water with toxic chemicals. The total climate impact of the fashion industry is unknown but it's estimated that it contributes towards upward of 10% of the planet's greenhouse gas (GHG) emissions³. Environmental and labor concerns in fashion production abound as a result of vast supply chains that lack transparency and are difficult to oversee. Meanwhile, textile waste is a growing issue, both in the U.S. and around the world. Domestically our textile waste has grown 80% since 20004 and is our nation's fastest growing waste stream. We send over 30 billion pounds of textile waste to our landfills and incinerators annually⁵, which costs U.S. taxpayers and private haulers billions of dollars a year. Meanwhile, domestic municipal landfill space is dwindling⁶ and is our third largest methane emitter⁷, responsible for 25% of global warming8. Particulate matter from local and regional waste sites disproportionately affects the air quality of our most vulnerable communities9. Additionally, microfiber fragmentation from textiles occurs during both the upstream manufacturing, and the wear and laundering phases. This poses a pollution threat to human and animal life vis-a-vis our air, water, and food systems¹⁰, with increasing scientific evidence that shows microfiber pollution, shed by plastic based textiles (polyester, nylon, elastane), has neurotoxic, carcinogenic, immune and endocrinedisrupting human health impacts.11

Moreover, our fashion waste has dire consequences in the Global South, in communities with comparatively low levels of economic and industrial development. The decreasing quality and increasing volumes of secondhand exports to our trading partners in these areas can impose catastrophic environmental, health, and social consequences. In 2020 the biggest net exporter of used clothing in the world was the United States, and between 1990 and 2004 the global trade of second-hand clothing increased ten times. It is estimated that 30-40% of all the clothing bales sent to East Africa, one of the world's largest used clothing import regions, cannot be sold. Much of this region lacks disposal infrastructure to handle the massive quantities of textile waste, which end up along rivers or at settlement borders. Some of the waste is burned openly, which can lead to human health problems, and the clogging of rivers and drains can result in floods. As these clothes decompose they release methane, hazardous chemicals, and synthetic fibers which take hundreds of years to biodegrade.¹²

- 3. The World Bank: How Much Do Our Wardrobes Cost to the Environment?, 2019
- 4. NIST, Facilitating a Circular Economy for Textiles Workshop Report, May 2022
- 5. EPA, Textiles: Material-Specific Data
- 6. Abel, As landfill space dwindles in Massachusetts, New Hampshire has become the state's dumping ground Boston Globe, 2021
- 7. EPA, Basic Information about Landfill and Gas
- 8. U.N. Environment Programme: What's the Deal with Methane?, 2022
- 9. Jbaily, A., Zhou, X., Liu, J. et al. Air pollution exposure disparities across US population and income groups. Nature 601, 228–233, 2022
- 10. The Nature Conservancy & Bain, 2021
- 11. Neira, M., 2023. The Minderoo-Monaco Commission on Plastics and Human Health: Editorial to accompany the Minderoo-Monaco Commission on Plastics and Human Health in the journal, Annals of Global Health. Annals of Global Health, 89(1), p.22
- 12. GreenPeace, Poisoned Gifts From donations to the dumpsite: Textile waste disguised as second-hand clothes exported to East Africa, 2022

THE DOMESTIC CIRCULAR FASHION ECONOMY OPPORTUNITY.

The U.S.'s fashion waste problem is in part owed to the fact that, while existing domestic policies incentivize recycling of certain household waste streams, none support textile waste reuse and recycling. We propose not only textile recycling, but a complete shift from a linear to a circular fashion economy. For further context, a linear take-make-waste¹³ model only grows under the false premise that Earth's resources are unlimited, and that our environment has unlimited capacity to absorb waste and GHG emissions. Recycling provides one solution to a waste problem, whereas the circular fashion model presents an entirely new economic alternative: economic growth through reducing overall virgin material extraction through resale, repair, rental, and upcycling and finally recycling¹⁴.

Fashion's circular economy also includes adjacent innovations which aim to limit overproduction and support the life extension of what we produce. These innovations include, but are not limited to, on-demand manufacturing, retail demand forecasting technology, improved inventory management technology for circularity, and material science dedicated to reducing the environmental impact of material production and preserving natural resources. A circular fashion industry: provides jobs and economic development; protects our supply chains; provides value and sustainability to consumers; operates best when accessible and scaled; and should prioritize the waste hierarchy.

JOBS AND ECONOMIC DEVELOPMENT

Addressing fashion's sustainability issues, and pursuing the corresponding opportunities in fashion's circular economy, create tremendous room for increased U.S. jobs growth, innovation, economic development, and productivity. This is a new, youth-led way of thinking about ownership, the extended value of products, and economic empowerment. It is conservatively estimated that fashion's circular economy represents \$560 billion in economic opportunity¹⁵. The rapid growth of reuse business models in recent years, along with the growing number of consumers who informally resell and rent from their own closets to recapture value or to start cottage businesses, along with the increasing demand for recycled textiles and the emergence of new textile recycling technologies, are indicative of a growing formal and informal economy around circularity.

^{13.} The take-make-waste model refers to the linear process of taking materials from the Earth, making products from them, and eventually throwing them away as waste. Please see the Ellen MacArthur Foundation for additional details.

^{14.} A framework of circular business models for fashion and textiles: the role of business-model, technical, and social innovation

^{15.} Ellen MacArthur Foundation, A New Textiles Economy

The job skills required for fashion reuse and recycling businesses range from entry level to highly-skilled, and represent a vast array of sectors including clean chemistry and energy, technology, resale, logistics, sorting, repair, recycling, textile manufacturing, and more. If we act swiftly, public policy can bolster the U.S.'s \$344 billion portion of the \$1.5 trillion global fashion industry, and usher in a new era of productivity. Over the last 20 years, the U.S. lost 750,000 apparel manufacturing jobs to overseas manufacturing¹⁶. Fashion manufacturing jobs in the U.S. now comprise only 0.002% of the total 75 million global apparel workforce. We don't suggest a return to the way things were in the past, but rather to pave the way for a net-new economic era, where domestic fashion circularity models provide jobs and the opportunity to recapture the value of the goods we purchase, over and over.

PROTECT OUR SUPPLY CHAINS

Protecting our supply chains by keeping domestic resources in circulation and manufacturing our own goods is a national security imperative. As was laid bare by the COVID-19 crisis when the U.S. was unable to produce sufficient personal protective equipment (PPE), the U.S. has insufficient manufacturing capacities to meet domestic retail demands. In addition, access to materials is increasingly under pressure. Major global sources of imported goods, like cotton garments and textiles, have seen recent bans in the U.S. as a rightful reaction to forced labor in these supply chains, but leading to supply constraints and rising costs for cotton textiles. Water scarcity also puts increasing pressure on the ability to grow and sell cotton globally. In addition, energy intensive materials like petroleum-based materials, such as virgin polyester, are increasingly expensive. Reuse, repair, and recycling offers the U.S. an opportunity to ensure access to our own raw and finished textile-based goods domestically and will safeguard our supply chains.

VALUE AND SUSTAINABILY TO CONSUMERS

Circular fashion models aim to do more with what has already been produced, while reducing overall environmental impact. These models can deliver increased value to consumers, as they also reduce fashion's overall environmental impact when they displace new fashion production. Reuse models like resale provide apparel at a lower cost than buying new, and return value to independent resellers. Similarly, access-based models like rental provide fashion at a lower cost per garment. Repair models allow consumers to continue to enjoy their garments for longer. Recycling provides a way to turn end-of-life fashion back into raw materials without extracting virgin resources.

Furthermore, reuse can reduce the environmental impact of fashion by increasing the utilization of garments (i.e., the number of times a garment is worn during its lifespan). With more wear per garment comes a lower environmental cost per wear compared to a linear model, because the carbon emissions associated with that garment's production are spread out across each wear. While consumers can capture value and make conscious consumption decisions by adopting reuse, businesses can also benefit from scaling circular models such as resale, rental, repair, and recycling by decoupling revenue growth from increased production.

SUPPORT CIRCULARITY AT SCALE

ACT supports identifying near-term and long-term public policy solutions that help scale apparel and footwear reuse and recycling, so that solutions are widespread and accessible to all Americans no matter their economic status or geographic location. Unlike most household recyclables, fashion often does not require recycling after the first use – it can be reused multiple times, and belong to multiple owners, before recycling is needed. Shopping reuse, selling or donating your clothes, renting your wardrobe and participating in repair should become as easy as shopping new. Given our existing resale, rental, and repair industries, and the corresponding job skills and infrastructure that support those existing businesses, it makes sense to support policy that further scales and enables people and businesses to participate in these solutions.

On the other hand, textile recycling, an area in which many exciting and ground breaking technologies are emerging, should be a parallel longer-term domestic goal. Textile recycling will require new infrastructure and workforce skills, which can piggyback on the collection and sortation infrastructure channels established for reuse. Continued reuse of apparel and footwear will result in product that is inevitably unfit for resale, rental, and repair, and will feed into the textile recycling market. This will enable symbiotic market dynamics, where capturing products for reuse provides the necessary material feedstock for recycling.

PRIORITIZE THE WASTE HIERARCHY

Public policy that supports reuse will also enable the systems and market dynamics that support the waste hierarchy, which is in alignment with nationally and globally recognized guidance on waste and prioritizes source reduction and reuse, followed by recycling, then energy recovery and finally disposal. Reuse is one of the most impactful ways to reduce fashion's overall impact: it is estimated that buying a used item of clothing can reduce its carbon footprint by over 70%¹⁷, offsetting the need for manufacturing of a new item, which is the stage where the majority of a garment's water consumption, energy emissions, and chemical usage occur. Early research also supports findings that new garments/ textiles have the most fiber release in laundering18, while secondhand textiles release fewer microfibers¹⁹ and therefore pose less of a pollution threat. As previously stated, reuse will also enable us to collect and sort for recycling end-of-life textiles, diverting them from landfills and incinerators.



^{17.} EuRIC: LCA-Based assessment of the management of European used textiles, 2023

^{18.} Pirc, U., Vidmar, M., Mozer, A. et al. Emissions of microplastic fibers from microfiber fleece during domestic washing. Environ Sci Pollut Res 23, 22206–22211, 2016

^{19.} Athey et al. The Widespread Environmental Footprint of Indigo Denim Microfibers from Blue Jeans, Environ. Sci. Technol. Lett. 7, 11, 840-847, 2020

POLICY OBJECTIVES AND LEVERS TO ACHIEVE THEM.

ACT sees an immediate public policy opportunity to catalyze domestic circular fashion, with a focus on the waste hierarchy, in the same way that public policy initially bolstered clean energy manufacturing, deployment, and transportation models. One of our primary objectives is to support short- and long-term policy solutions, including at the federal, state, and municipal levels. Today, we advocate for policy changes that meet communities, consumers, and businesses where they currently are, through incentivizing businesses and consumers to participate in circularity, capturing the federal potential, and building on public policy that has worked to promote circularity in other sectors. In the future, we envision an interlocking set of policies that enable the full transition to a circular fashion system.

INCENTIVIZE THE GOOD

ACT's policy priorities begin with straightforward, nearterm public policy solutions to enable fashion circularity through financial incentive. Sales tax reductions or exemptions for secondhand apparel and footwear goods and services are a simple and effective policy lever to increase consumer demand for, and access to, used fashion and rental. This is relevant to modern consumer spending habits: for the first time in U.S. history, Americans have less earning capacity than their parents. Incentivising consumers to shop secondhand apparel and participate in rental models will increase consumer demand for sustainable and affordable fashion. It will also support the businesses and individuals reselling and renting fashion, as well as the charitable causes and public services that many secondhand thrift stores benefit. Thus far in 2023, secondhand sales and use tax exemption bills have been proposed in both Maryland and North Dakota, signaling that similar bills may follow in other states. These bills respectively focus on low price-point secondhand clothing or nonprofit businesses alone. Further reuse incentives could include expanding the price points covered and ensuring the inclusion of both nonprofit and for profit businesses. Additional reuse incentivization policy could include reducing taxation on repair, care, and maintenance services for consumers and businesses; and reducing taxation on clothing sorting, collection, reuse, and recycling businesses.



CAPTURE THE FEDERAL POTENTIAL

We are already set up to address fashion waste at the federal policy level. The 1990 Federal Pollution Prevention Act²¹ established a framework to garner industry, government, and public attention on pollution reduction through federal agency action. In August 2022, the Administration provided an implementation roadmap for this act through an Executive Order (the Implementing Instructions for EO 14057²²), which cites clothing as a material of importance and sets forth federal agency collection targets, with an emphasis on source reduction and reuse. ACT proposes that federal agencies continue to lead the way through collection and procurement of circular apparel and textiles. We also suggest that federal Congressional committees work toward passing bipartisan legislation that would provide a harmonized roadmap to state and local textile reuse and recycling solutions, so as to avoid patchwork state and local laws that can lead to confusion and irregularities in the availability and accessibility of circular solutions.

Additionally, The Inflation Reduction Act (IRA) and the bipartisan Infrastructure Investment and Jobs Act (IIJA) provides trillions of dollars of funding for renewable energy and transportation, while supporting jobs and economic growth through green domestic market initiatives. In the manner in which Congress saw the need to support domestic chip manufacturing via the CHIPS and Science Act, we should explore manufacturing incentives to onshore increased textile reuse and recycling.

BUILD ON WHAT WORKS: EPR AND DEPOSITS

ACT also supports leveraging successful public policy frameworks as a nearterm solution. For example, Extended Producer Responsibility (EPR) is a policy mechanism that incentivizes manufacturers to recycle what they produce. While the details of how EPR functions may vary, the manufacturers are directly or indirectly incentivized to participate in the collection and life extension or landfill diversion of their goods.

In the U.S., 118 EPR laws have been adopted across 33 states. However, these policies leave out textiles and reuse, almost exclusively supporting traditional household recycling for paper, bottles, and cans. ACT proposes that existing EPR laws be amended to include textiles and reuse, or that separate textile-specific EPR laws be enacted to include textile reuse in addition to textile recycling, aligning with the waste hierarchy. We also suggest that these policies be harmonized across municipal and state lines, including alignment on collection targets. The fees from these models should support logistics and infrastructure, and should decrease with compliance (sometimes known as eco-modulation). In 2023, the first US Textile EPR bill was proposed in California, and like the secondhand sales and use tax exemption bills in Maryland and North Dakota, this indicates that we can expect to see further state-level textile-specific EPR bills.

^{21.} FedCenter: 1990 Federal Pollution Prevention Act

^{22.} Implementing Instructions for Executive Order 14057 Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

^{23.} Waste Today: Building Capacity for EPR in the U.S., 2019

In addition to EPR, deposits could also successfully encourage textile collection and fund circular systems. For example, in 2022 lowa passed a new bottle bill that tripled the refund rates for covered containers - the first increase in 40 years - and expanded the number of redemption centers in order to incentivize collection. In New York, the New York State Bottle policy has been one of the most successful recycling programs enacted in the state. By charging a 5-cent fee on containers, redeemable upon return for recycling, the bill reduced roadside container litter by 70% in 2020 at no cost to local governments²⁴.

ACT believes that whatever models are stood up for textiles, they should enable a system that encourages consumers to take the right actions, and should fund the labor, logistics, sortation, and infrastructure needed to enable domestic reuse and recycling.

ENABLE A CIRCULAR FUTURE

We envision a future where fashion's domestic circular economy is widespread and accessible, and minimal fashion waste exists. To get there, we will need policy solutions that extend beyond the above measures. Enforceable design standards should be established for durability, reuse, repair, disassembly, and recyclability. Terms and definitions should also be standardized. For instance, the terms "recyclable", "recycled", and "recycling" are subjective and unproductive in the fashion context without standardized terminology. Standardization should extend to product labeling, digital or otherwise, on new products, with the aim of better informing consumers of care, origins, and material contents of new items. This will in turn facilitate resale, repair, and recycling by consumers and businesses. Increased disclosure through better new product labeling will also improve traceability within reverse and export supply chains, which will aid compliance with import requirements (e.g., the Uyghur Forced Labor Prevention Act) and reduce burdening other economies with our waste.

Finally, trade enforcement, regulatory actions, and oversight are important tools for limiting the availability of environmentally questionable, high volume, low-quality fashion on the market and ensuring responsible handling of end-of-life textiles. These could take the form of limiting the destruction of unsold and returned inventory, increased transparency around the final destination of unsold and returned inventory, reigning in tax loopholes that allow for the import of low-value clothing while avoiding import fees, oversight of total import volumes and/or quality of clothing imports, and overseeing the export of low-value used fashion through either export limitations or increased transparency.

THE INTERNATIONAL CONTEXT

To imagine a future state of circular fashion opportunities in the U.S., we can learn from the successes and challenges experienced in other markets. In 2008, France enacted the only national textile EPR policy for apparel and footwear in the world, with now over 40,000 collection points governed by 20 manufacturers, 3 industry federations, and over 4,096 members.

In 2020, the funds collected paid €17 million to sorting operators, €4 million to local community projects, and almost €1 million to innovation projects²⁵. Based in part on France's leadership and success, the EU has now announced that, as part of its Waste Framework Directive²⁶, it will develop harmonized EPR schemes for used textiles across all member states. Member states will be responsible for the separate collection of textiles by January 1, 2025, and the product manufacturers and producers will finance their reuse, recycling, and disposal.

Foreign governments have also stepped up to support investment in new technology that will enable the creation of recycled textile raw material feedstock. For example, the UK government contributed one third of the cost of a Fiber Sort machine for the Salvation Army²⁷, which uses infrared light to automatically sort textiles by fiber type so that they can be recycled back into new textiles. This support is an early sign of governments playing a supportive role in scaling technical solutions that are presently stymied by manual processes, like fiber sorting for material recovery.

We can also look to the EU's Eco-Design Framework²⁸, which proposes a design for circularity, including disclosure of information about a product's carbon and environmental footprint, proportion of recycled content, durability, reusability, upgradability, and repairability. We believe that this measure will benefit consumers and businesses alike: in 2021 eco-design saved EU consumers €120 billion in energy expenditure costs, and led to a 10% lower annual energy consumption by the products in scope. Though the U.S.'s political landscape is distinct, necessitating our own path forward, we can look to other developed markets that are ahead in establishing fashion waste policy in order to inform our own work.



^{25.} Wilson, The Guardian: Learnings from France on Textile Waste and EPR, 2021

^{26.} Waste Framework Directive

^{27.} Afanasieva, Bloomberg: A Machine That Sorts Moth-Eaten Sweaters Is Helping Stem Textile Waste, 2023

^{28.} European Commission: Ecodesign for sustainable products

CALL TO ACTION

Now is the time to capitalize on existing momentum and enact public policy that will support the U.S. economy and protect our communities. Bipartisan policy-making efforts are needed to support the building of circular fashion markets that will usher in a new era of innovation, economic health, and environmental protection, as has been done in the energy and transportation industries. We encourage consumers to call on policy makers to push forth the types of legislation discussed in this paper; and to shift their shopping, reuse, and recycling behaviors. We urge fashion brands to shift to circular business models and design apparel and footwear with reusability and recyclability in mind. We hope that all of these groups, as well as philanthropic and trade organizations (with whom we aim to work in concert in order to extend your work and efforts) and other stakeholders feel inspired to join, engage with, and support ACT's mission.

If you or your organization would like to support ACT's work, please engage with us and/or our mission by:

- » Sharing this paper with your local policy makers and relevant stakeholders at the local, state, and/or federal level
- » Contact us via email at ACT@americancirculartextiles.com
- » Follow along with our work via our social media channels: <u>LinkedIn</u>, <u>Twitter</u>



APPENDIX.

The following sets forth ACT's Beliefs, a framework from which our coalition operates, and from which we align on potential policy measures that could lead to competitive and durable economic development, job creation, and positive environmental outcomes in the U.S.

WHAT WE BELIEVE

1

RESPONSIBLE FASHION INDUSTRY OVERSIGHT CAN PRODUCE ECONOMIC AND SUSTAINABLE ENVIRONMENTAL OUTCOMES.

Similar to other industries that have transitioned to more sustainable manufacturing and generation business models like energy, construction, and transportation, a fashion pivot is needed. Americans are some of the largest consumers of fashion globally but that comes with a cost. The Fashion industry is responsible for up to 10% of global carbon emissions²⁹, consumes 1.35% of global oil production³⁰, and results in the excess of billions of garments that end up in landfills or incinerators. Thoughtful policy is critical to address the fashion industry's environmental impact and move the market toward sustainable circular business models.

2

TEXTILE WASTE IS COSTLY.

Textile waste is our nation's fastest growing waste stream, costing American taxpayers and ratepayers over \$4B annually. US landfills are our third largest methane emitter³¹. Textile waste has increased 80% since 2000³², now comprising nearly 8% of all U.S. landfills³³. Unlike paper, bottles, and cans, there are few domestic policies supporting the end-of-life recovery of textiles. We only recover an estimated 15% for reuse and recycling³⁴. The remaining textile waste is hauled to landfills and incinerators, which disproportionately pollute disadvantaged communities³⁵ in the United States. Furthermore, much of the 15% collected cannot be effectively reused because it is of low value and quality. Many low quality goods are exported to the Global South, imposing negative environmental and social consequences on communities that lack waste management or recycling infrastructure. Regulatory measures are needed to encourage improved garment quality, reduce overproduction, and incentivize domestic collecting, sorting, reuse, and recycling infrastructure.



EDUCATION IS KEY.

We are committed to developing educational opportunities for consumers and policy makers in order to drive awareness of the true cost of fashion. Education will unlock circularity's growth potential for positive social and environmental impact. U.S. consumers must be educated on reuse as an accessible, affordable, and more environmentally-friendly alternative to linear apparel and footwear business models.

- 29. The World Bank: How Much Do Our Wardrobes Cost to the Environment?, 2019
- 30. Changing Markets Foundation, Fossil Fashion: The hidden reliance of fast fashion on fossil fuels, 2021
- 31. EPA, Basic Information about Landfill and Gas
- 32. NIST, Facilitating a Circular Economy for Textiles Workshop Report, May 2022
- 33. EPA, Textiles: Material-Specific Data
- 34. EPA, Textiles: Material-Specific Data
- 35. <u>Harvard T.H. Chan School of Public Health, Air pollution exposure disparities across US population and income groups</u>



CIRCULAR BUSINESSES GENERATE U.S. JOBS

and forge a net-new domestic green industry. Positions range from entry level, with on-the-job training, to highly skilled technicians and technological innovation. Circular business models will reinvigorate our domestic fashion and manufacturing industries and have the power to help safeguard our domestic supply chains.

5

COMPANIES CAN GROW SUSTAINABLY.

Ready-to-go circular business models exist and can be adapted and scaled to drive revenue through higher utilization of the clothing that is already produced³⁶. Resale, rental, and repair models are successful blueprints for a new type of economy that can decouple revenue from overproduction. These models can be bolstered by supportive policy, now.

6

THE WASTE HIERARCHY IS IMPORTANT37.

Reduction, reuse, and then recycling, should be prioritized over energy recovery and disposal for end-of-life textiles. Reuse has a 70% lower environmental impact than new textile production, whereas recycling has over 10 times the carbon impact of reuse³⁸. Additionally, reuse provides widespread access to affordable Fashion, offsets the need for primary material production, and defers a garment's true end of life. Finally, recycling is important because every garment reaches its end of life, and it offers an opportunity to divert fashion from landfill and incineration and recapture valuable resources, turning them back into new.

7

FUNDING CIRCULAR SOLUTIONS WILL LEVEL THE PLAYING FIELD.

For circular solutions to replace linear we need widespread, accessible logistics and infrastructure. We need well designed systems that facilitate consumer access to convenient and affordable programs for used fashion and usher in new technological innovations and end markets for recycled materials. These should include collection, sortation, recommerce, remanufacturing, and recycling infrastructure.

8

CIRCULARITY BY DESIGN.

We need to design for circularity, with a focus on durable, recyclable, products intended for longevity, repair, and ease of disassembly. This will facilitate reuse as well as recycling. Circular business models should be **incentivized over virgin fashion production** in order to eliminate the landfilling and destruction of usable products and materials.



FASHION CIRCULARITY STANDARDS AND DEFINITIONS ARE NEEDED.

For example, the terms "reuse", "recycle", "recycled materials", and "downcycle" are often conflated, misleading consumers. In addition, consumers are often mistaken in thinking that recycling is the best first option for fashion life extension, when in actuality reuse is often the best first option. Standards and definitions will enable increased transparency, improved garment labeling, and provide an improved policy and oversight framework.

^{36.} EMF, Rethinking business models for a thriving fashion industry

^{37.} EPA, Sustainable Materials Management: Non-Hazardous Materials and Waste Management Hierarchy

^{38.} EuRIC Textiles/Norion Consult, LCA-based assessment of the management of European used textiles, 2023

