TextileExchange
Creating Material Change

Climate Action through Fiber

Textile Exchange's Climate+ and Regenerative Wool

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Panelists

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Textile Exchange

Climate+

Textile Exchange's Strategy Evolution

TextileExchange
Creating Material Change

OUR **MISSION**

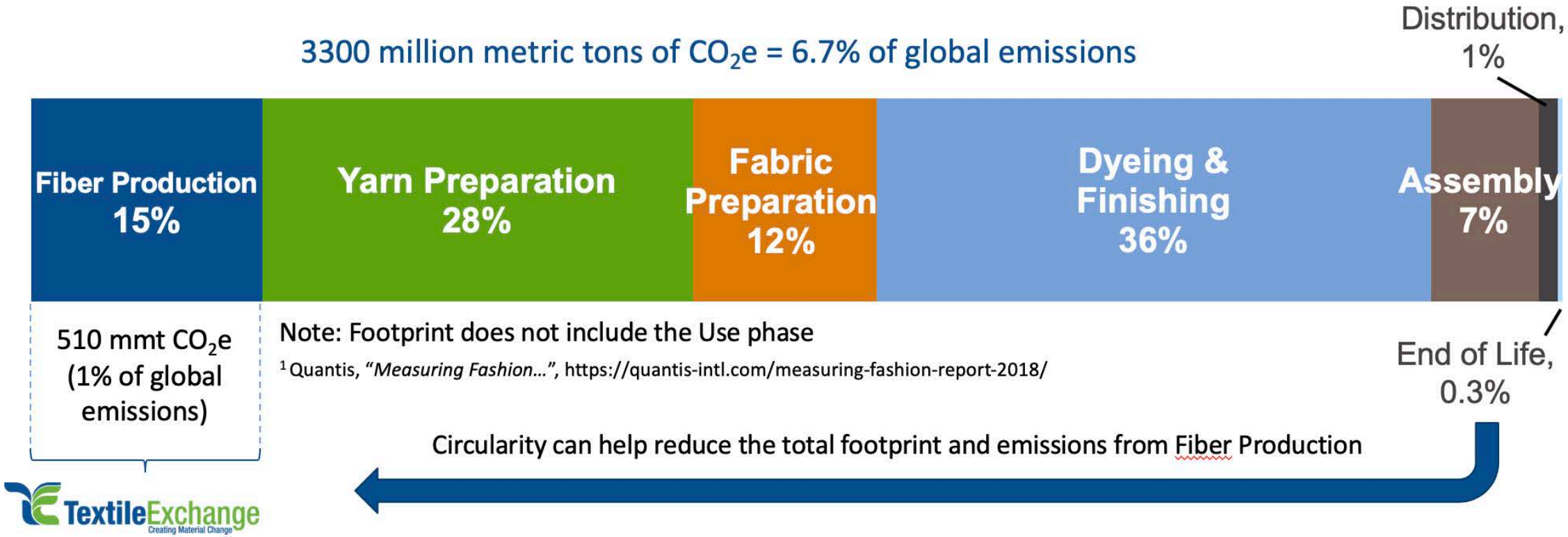
Textile Exchange inspires and equips people to accelerate sustainable practices in the textile value chain. We focus on minimizing the harmful impacts of the global textile industry and maximizing its positive effects.

OUR **VISION**

We envision a global textile industry that protects and restores the environment and enhances lives.

2016 Apparel CO2 Footprint

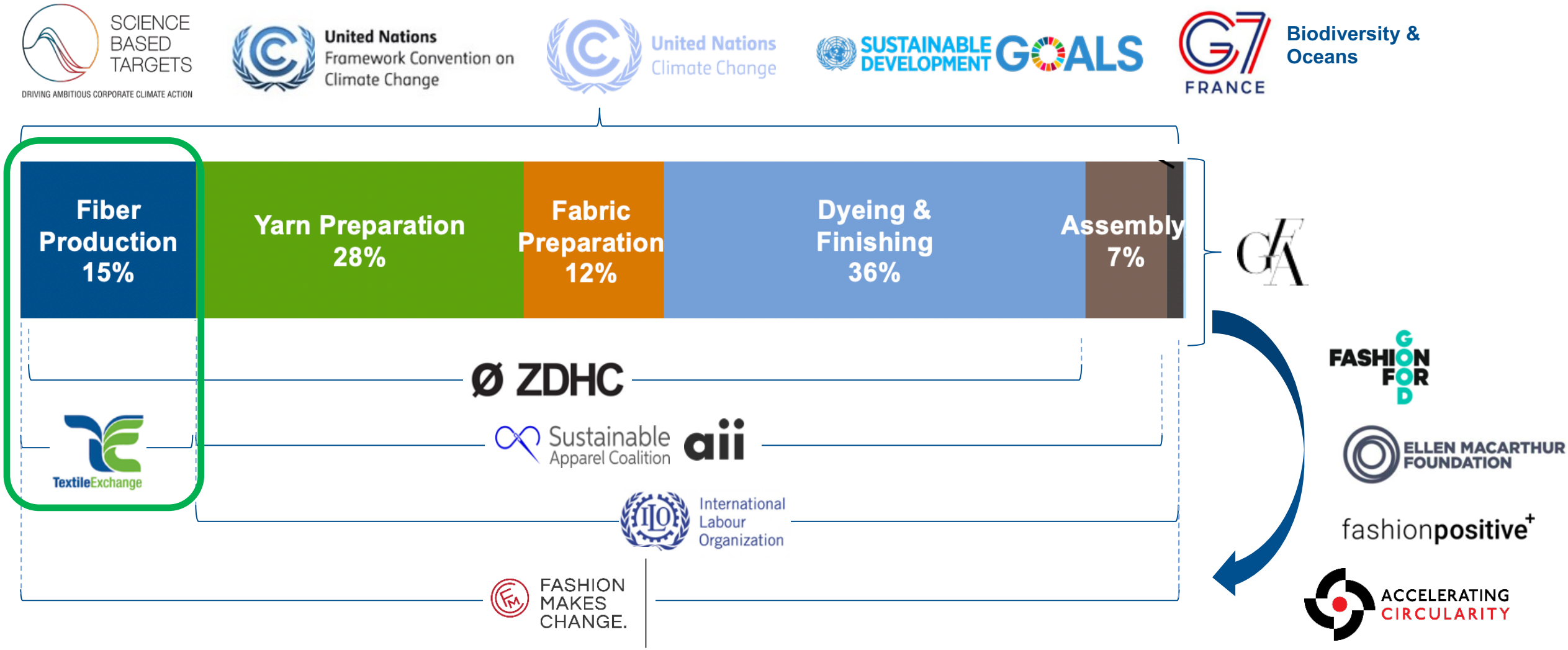
Published by Quantis



* This baseline is used as a starting point measurement, recognizing that there are new and other relevant calculations emerging. Each supply chain is unique in the distribution of impacts across tiers. We recognize tier 4 can represent anywhere from 10– 40% of total emissions.

Partnering & Convening to Address Impacts

Meaningful change will only occur through collaboration & recognition of the interconnected supply chain.

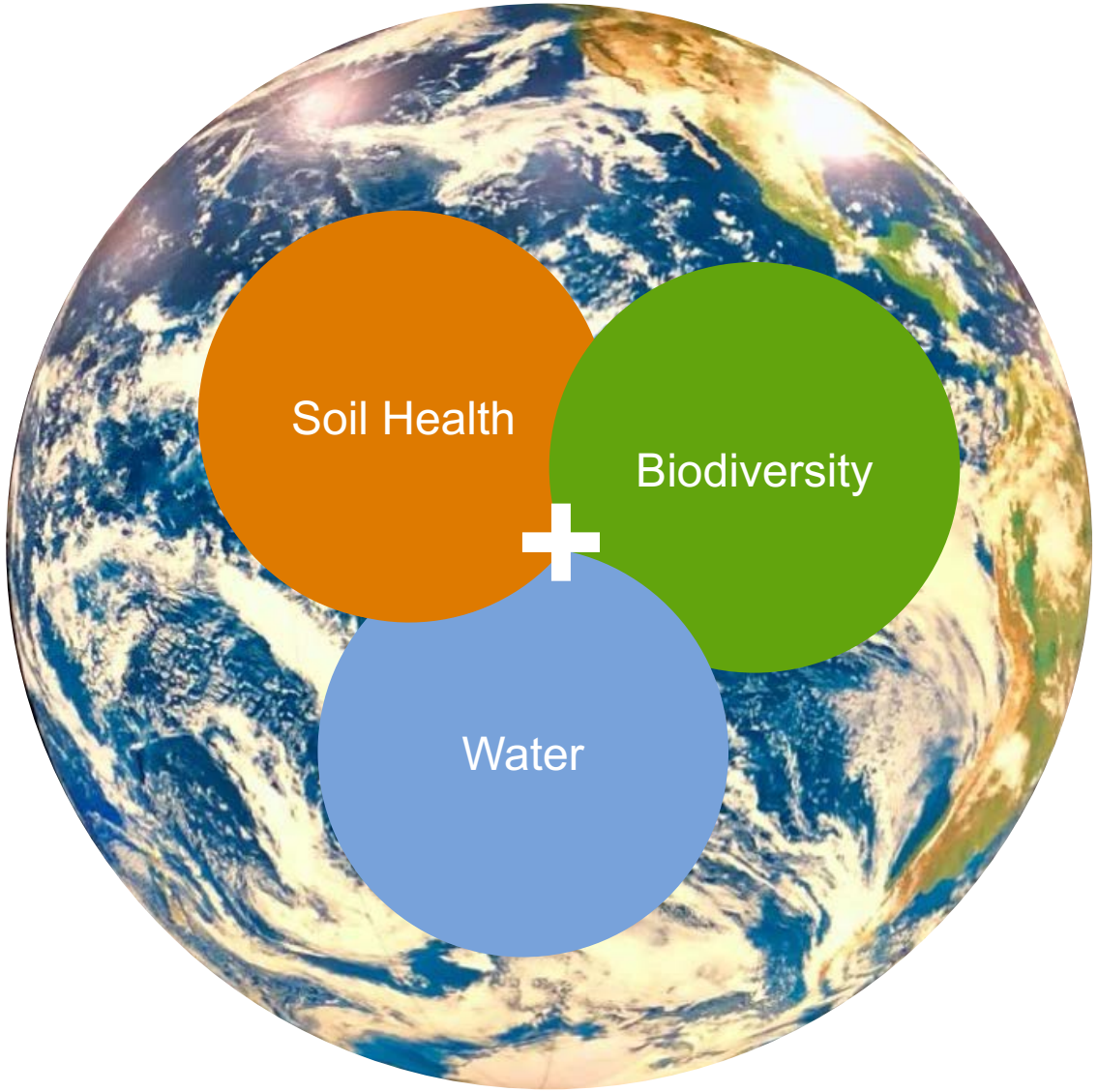


Climate+

Textile Exchange's strategic intent over the next 10 years is to be a driving force for urgent climate action in textile fiber and materials production, specifically:

Enabling and guiding the textile industry to reduce GHG emissions (CO2 equivalents) ***35% to 45% by 2030*** in the pre-spinning phase of textile fiber and materials production.

Amplifying positive impacts in soil health, water, and biodiversity.

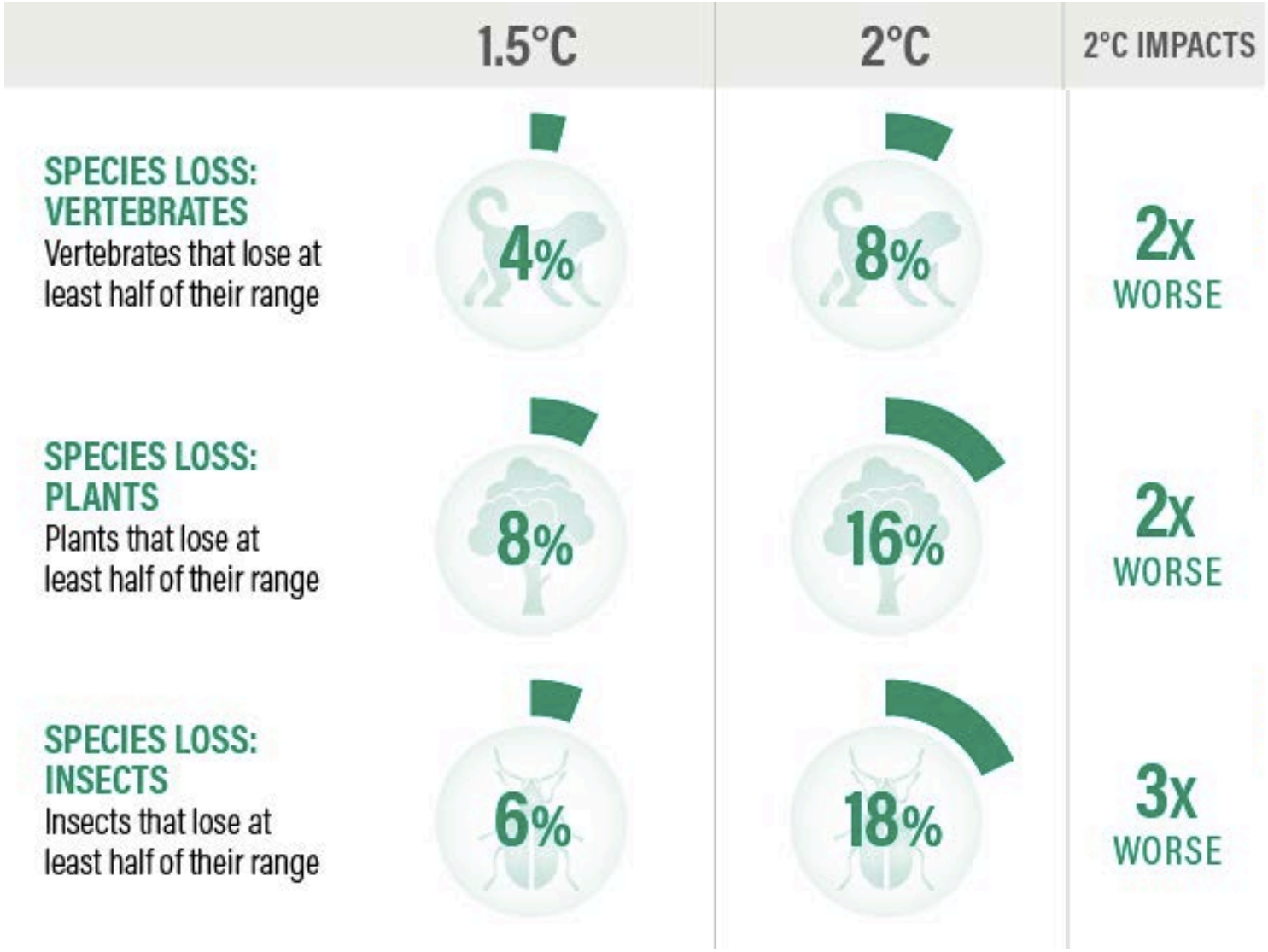


The Scientific Basis for Climate+

- To prevent 1.5°C of warming, global CO_2 emissions must fall by 45% from 2010 levels by 2030, reaching ‘net zero’ around 2050 (IPCC 2018)
- This was an update to the 2°C pathway (25% by 2030, net zero by 2070)
- “Rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities needed to limit warming to 1.5°C”
- Sequestration will be a necessary piece of 1.5°C
- From 2018, planet had ~10 years of carbon left

Link: https://www.ipcc.ch/sr15

The Difference Between 1.5°C and 2°C*



Source: WRI

Strategy Evolution

FROM: Raising Awareness 2004-2020

Educate and grow the industry.
Launching & supporting the adoption of PFM through Market-driven solutions best practices, traceability, and SC commitments

Standards:
Verify and support the adoption of a portfolio of PFM across 7 standards, over 10,000 certified sites

Fiber Report:
Collect data and deliver reports on preferred fiber and material production and consumption

Convening / Engagement:
Significant growth across all key activities: Round Tables, Conference (up to 900+ in 2019), Membership (17– 425+ members)

TO: Accelerating Adoption 2020-2030

Lead the industry.
Prioritize strategy execution and measuring value drivers & outcomes to significantly accelerate adoption of PF

Comprehensive PFM Guidance:
Lead on problem-solving across the fiber portfolio

Data Rich Communications:
Measuring, benchmarking, and driving PFM evolution

Partnership:
Models and execution based on both Climate+ outcomes and data that evidences partnership benefits. Choose to follow or let others lead.

Business models:
Improve and enhance existing business models to shift focus to ROI^2, Natural Cost Accounting and the Triple Bottom Line

Climate+

1. Decarbonize* materials portfolio

Switch to preferred** materials

- **Swap out carbon-intensive renewable materials** for proven*** lower intensity alternatives e.g. conventional to organic.
- **Increase use of recycled materials** particularly to displace non-renewable virgin material use (added benefit of removing waste and pollution from environment).

**The biggest "decarbonization" results for the industry will come from energy efficiencies, transition to renewable energy, and process innovations.*
***"Preferred" materials include socio-economic and other environmental alongside climate-related criteria.*
****According to SAC Higg MSI.*

2. Natural climate solutions

Embed nature* in materials strategy

- **Avoid** impacting intact ecosystems/effective carbon sinks e.g. high conservation value areas (HCV), high carbon stocks (HCS).
- **Reduce** impact on non-productive and productive lands e.g. relevant certification.
- **Regenerate** degraded productive land e.g. regenerative cropping and grazing practices.
- **Restore** degraded ecosystems e.g. forests, wetlands, coastal reefs.
- **Transform** through advocacy and collaboration.

**According to the Mitigation / Conservation Hierarchy*

3. Transition to a circular economy*

Create a "whole systems" material change

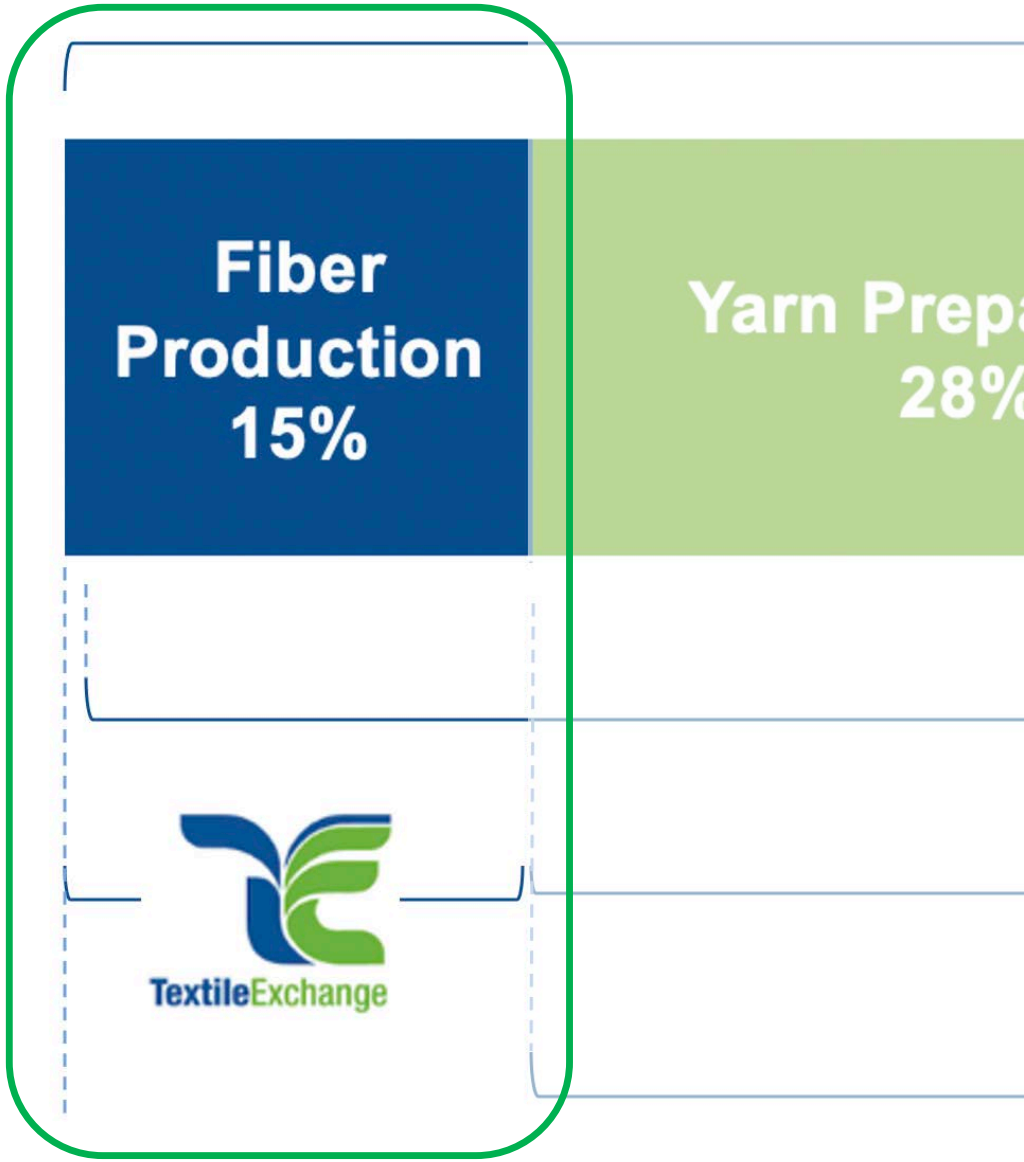
- **Decouple consumption** (particularly fossil-based) from business success.
- **Reduce** pressure on natural systems.
- **Create more durable products** that last longer in their first life and are loved longer.
- **Innovative business/service models** to keep materials in their first life longer e.g. designing for recyclability, re-commerce, repair, rental.
- **Use recycled inputs** increasing textile-to-textile. Remediate through waste collection.

**According to the EMF Circular Vision*

Climate + Biodiversity + Water + Soil Health

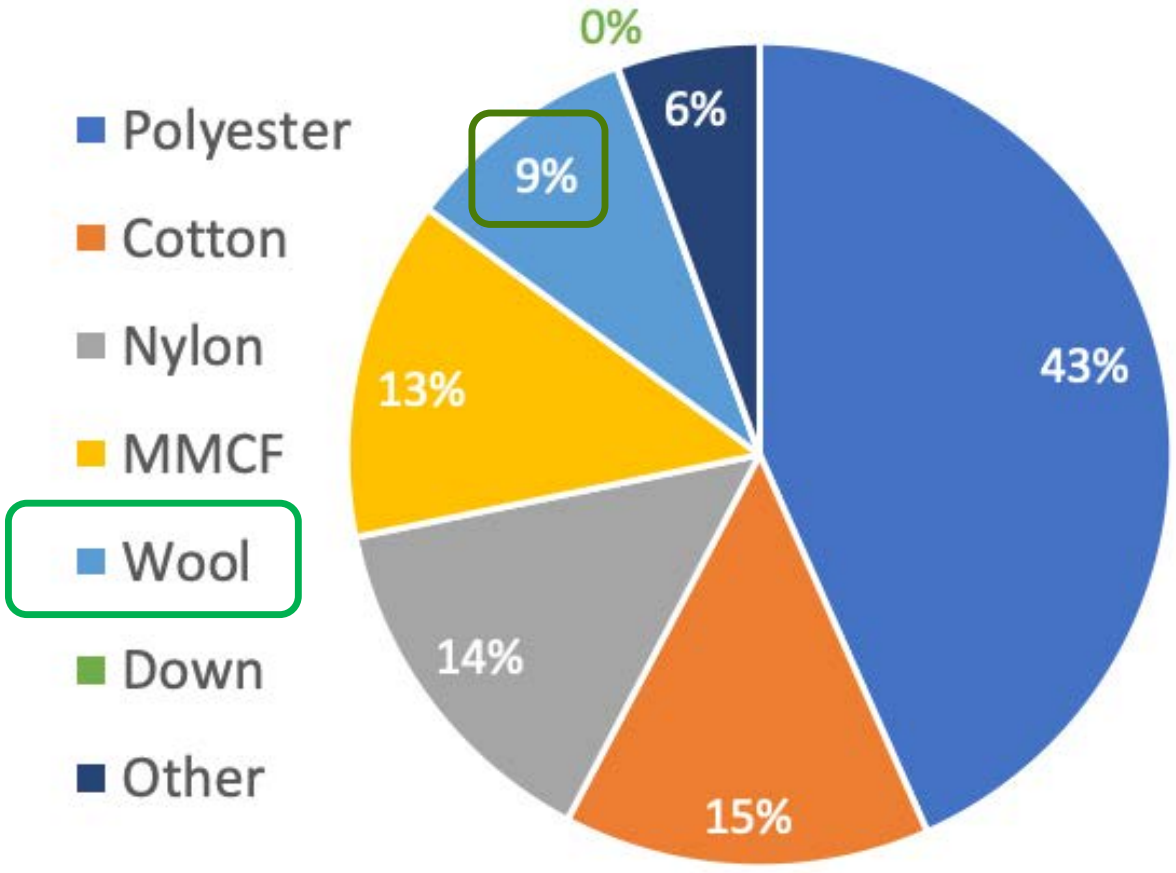
Scope of Climate+ Strategy

Material	Processes in Scope
1. Cotton	Field to bale
2. Polyester	Oil / gas to amorphous PET pellets
3. Nylon	Oil / gas to pellets
4. MMCF	Wood to regenerated cellulose
5. Wool	Field
6. Down	Farm
7. Leather	Field



Baseline: 2019 Emissions

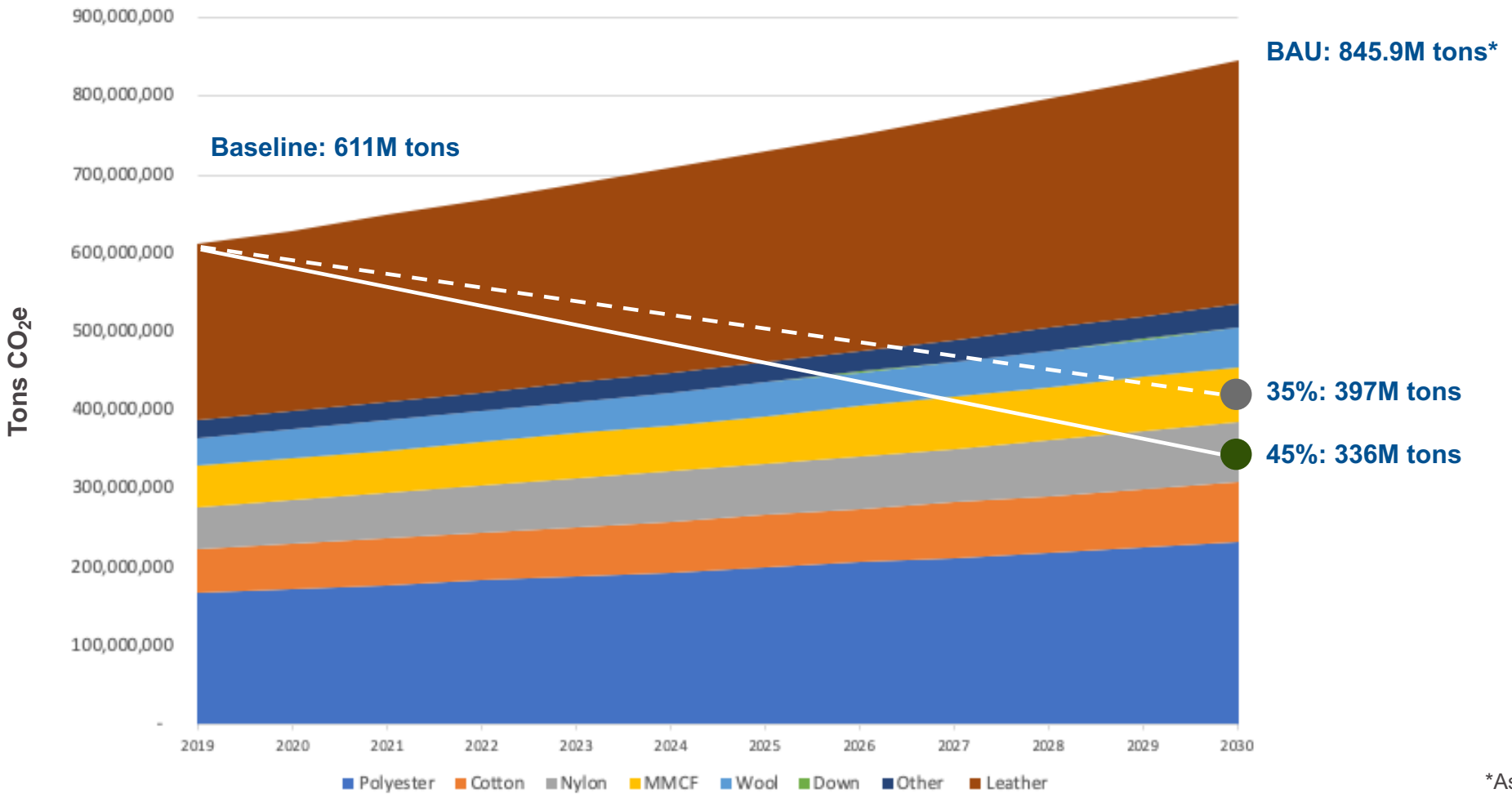
387 million tons CO_2e



Fiber Volume 2019

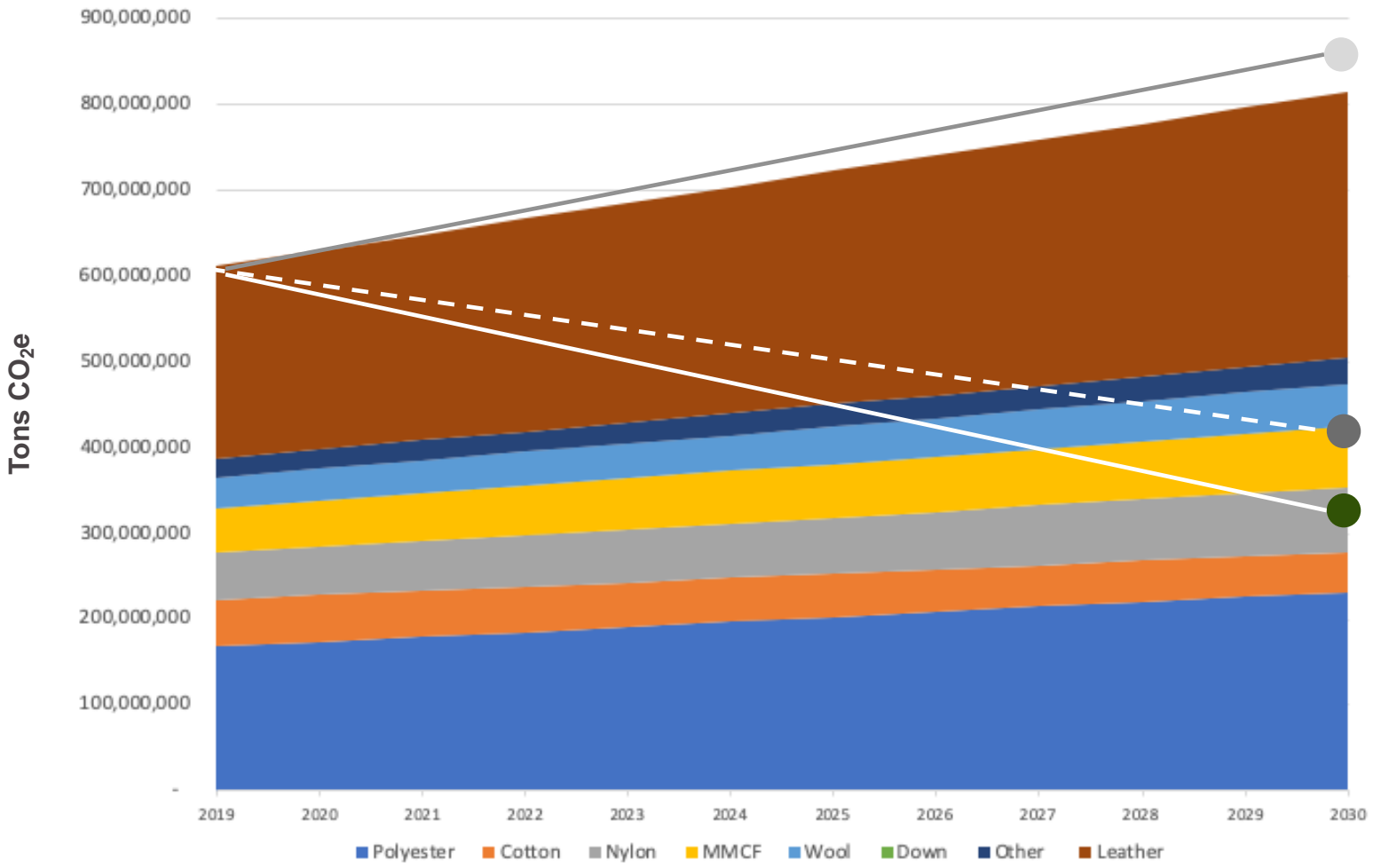
Material	Tons	% V	% GHG
Polyester	57,700,000	56.3%	43%
Cotton	26,000,000	25.3%	15%
Nylon	5,580,000	5.4%	14%
MMCF	7,084,100	6.9%	13%
Wool	1,070,000	1.0%	9%
Down	270,000	0.3%	0%
Other	4,870,216	4.7%	6%
Total	102,574,316	100%	100%

2030 Pathway: Business As Usual*



*Assumes 3% growth in fiber volumes

2030: 75% Preferred Cotton



BAU: 845.9M tons

75% Preferred Cotton*
814.9M tons

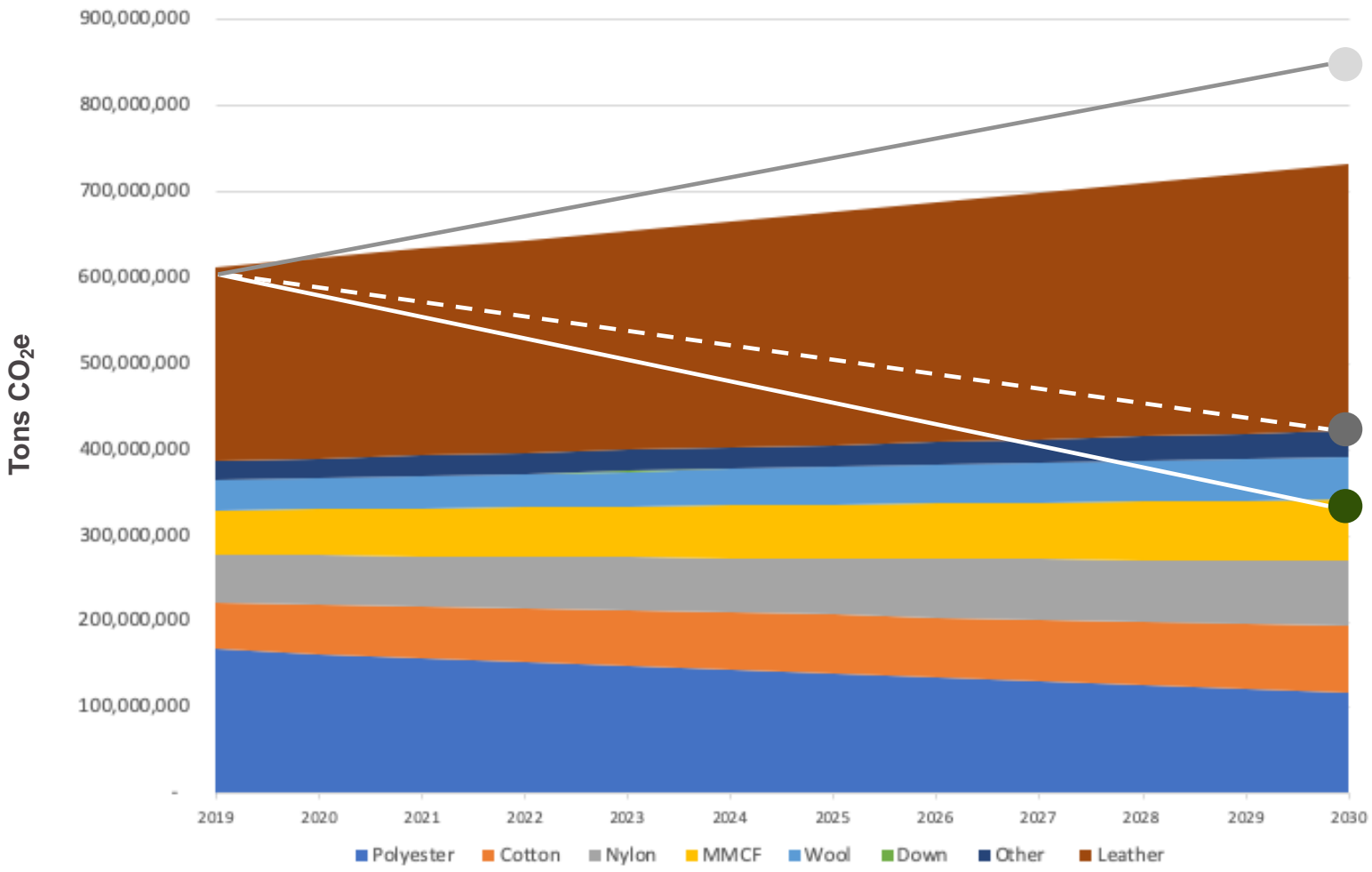
▼ 3.7%

35%: 397M tons

45%: 336M tons

*10% CMiA, 35% Organic, 30% recycled

2030: 75% Recycled Poly



BAU: 845.9M tons

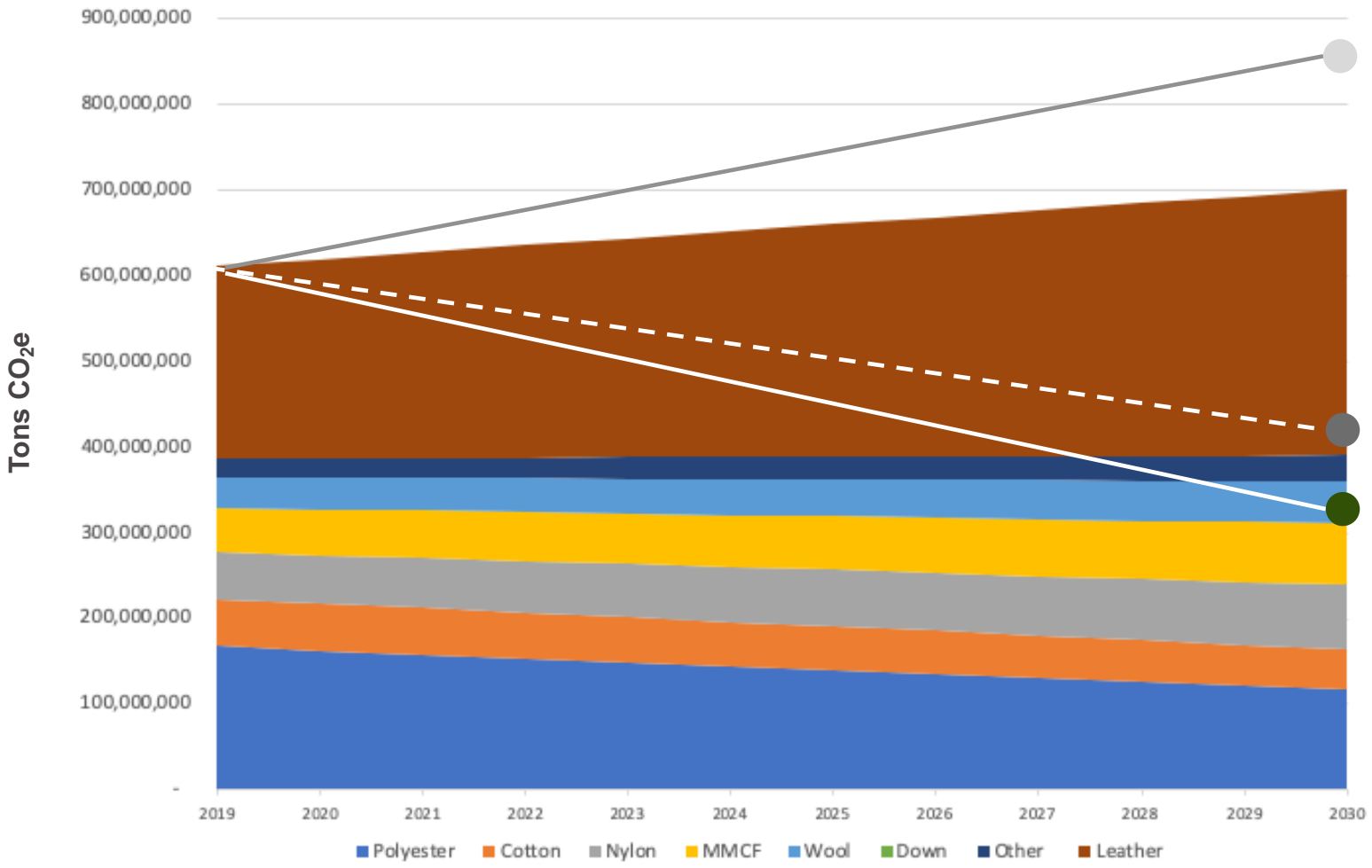
75% rPET
732.2M tons

▼ 13.5%

35%: 397M tons

45%: 336M tons

2030: Preferred Cotton & rPoly



BAU: 845.9M tons

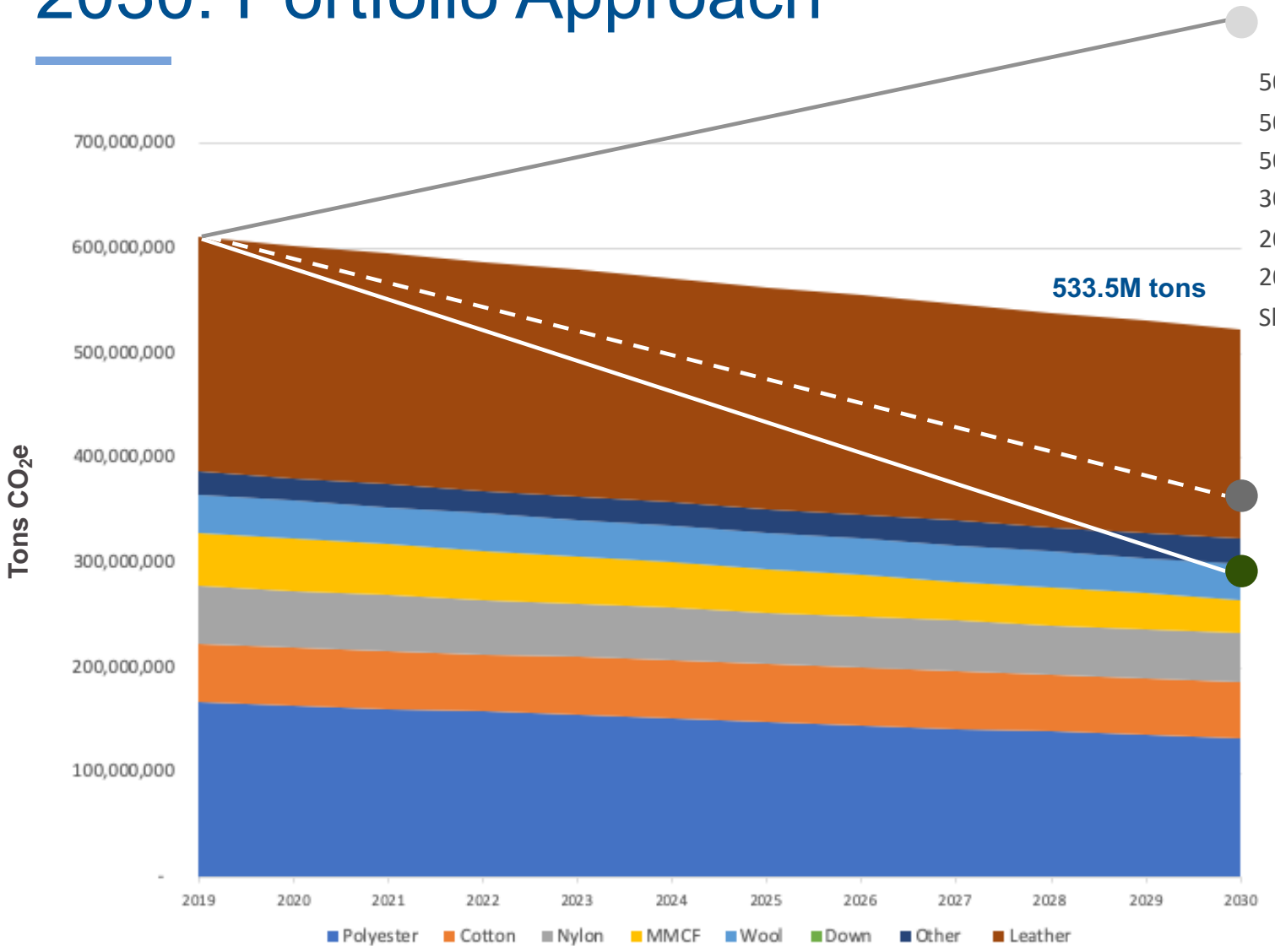
75% Preferred Cotton
75% rPET
701M tons

▼ 17.1%

35%: 397M tons

45%: 336M tons

2030: Portfolio Approach

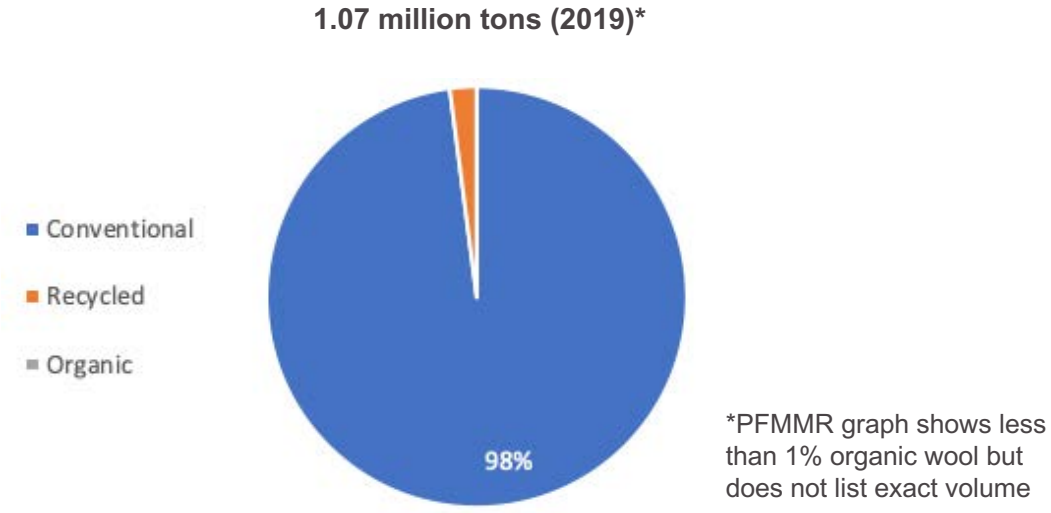


Aggressive Substitution
312M tons
▼ 37%

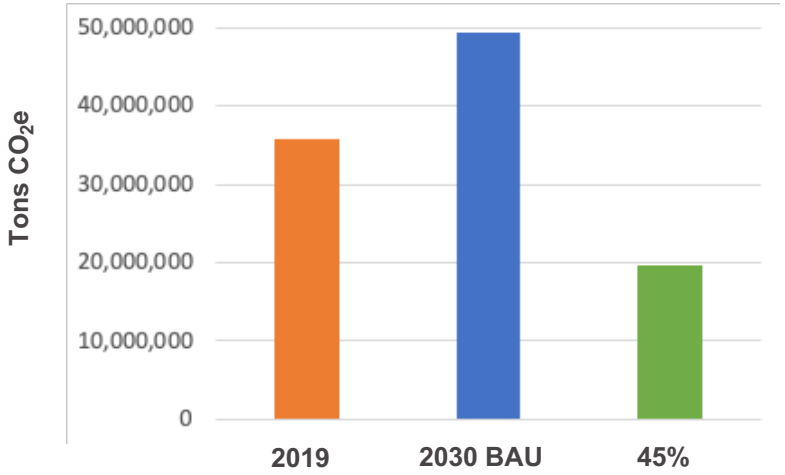
Innovation Gap
197M tons
▼ 23% more from BAU

*Assumes 3% growth in fiber volumes

Wool



*PFMMR graph shows less than 1% organic wool but does not list exact volume



Key Sources of Emissions

According to the LCA cited in the MSI, enteric methane emissions are 72 to 88% of total GHG emissions across four production systems. Nitrous oxide is 9 to 21%.

GHG Score (MSI)	
Wool (sheep)	30.3
Recycled wool	2.94


RESPONSIBLE WOOL STANDARD
R·W·S
CERTIFIED

RWS Objectives

- Ensure that wool does not come from animals that have been subjected to any unnecessary harm.
- Reward and influence the wool industry for strong animal welfare and land management practices.
- Provide robust chain of custody from farm to final product.
- Create an industry benchmark to drive improvements in animal care and land management where needed.

Regenerative farming in practice

What has the result been like?
The results can be seen in the increased plant density, the increased carrying capacity and more palatable plant species coming through, it also helps curb erosion and slows down run off. The more moisture we can retain in the soil the more effective rain is.

Would you recommend this farming method to other farmers?

I would highly recommend this to all conventional livestock farmers. More and more farmers are realizing how important rotational grazing is and rest periods. “Holistic Management” can be done to varying degrees depending on management structures. One needs to be flexible in your management as not one farm is the same.

Brett Walker, Jansenville District, South Africa

Regenerative farming in practice

"…I've always known that the greatest value we bring as managers of working landscapes goes beyond the harvests -- it's the positive impacts to soil, grasslands and the greater ecosystem. Therefore, our next step will be to document the ***climate impacts*** of our ranching practices."

Jeanne Carver, Imperial Stock Ranch

The **Shaniko Wool Company Carbon Initiative** has launched a pioneering initiative to measure the aggregate value of their combined land management impacts and quantify wool's contribution.

Image credit: Imperial Stock Ranch

Next steps: Climate + and wool

Support efforts to **Identify, share, and measure the impacts of low GHG grazing practices.**

RWS & RMS: Collecting and aggregating information on regenerative grazing practices on all RWS and RMS farms.

Wool, Mohair and Alpaca Roundtable: Join the upcoming Roundtable meeting to discuss opportunities for collaboration and collective action!

Image credit: Imperial Stock Ranch

EILEEN
FISHER

HORIZON 2030

WHAT IF WE DID THINGS DIFFERENTLY?


Climate Action Through Clothing


Video

PLAN

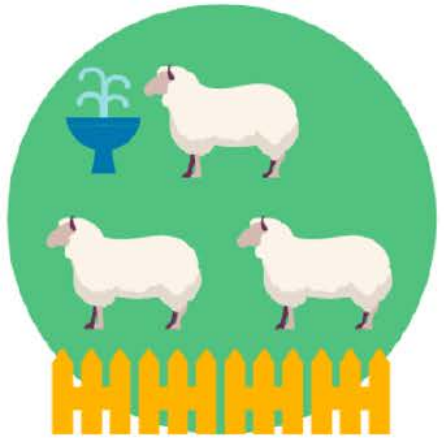
Farmers select regenerative practices they are interested in and willing to adopt or expand

ESTIMATE

Conduct carbon modeling for those practices and estimate how much carbon will accrue in the soils over 30 years

FINANCE

Companies pay today for those future, estimated carbon accruals – and this money finances the regenerative practices



IMPLEMENT

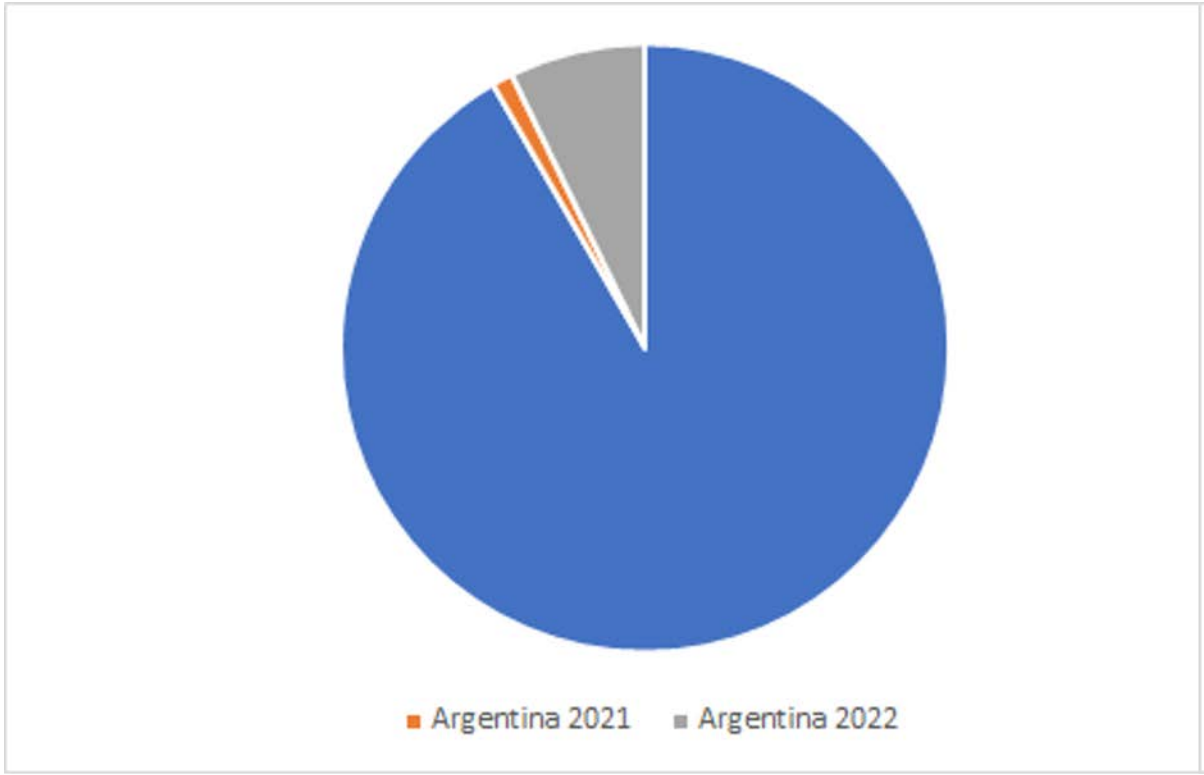
Farmers agree to adopt practices for three decades, conduct the project, and report annually on their practices

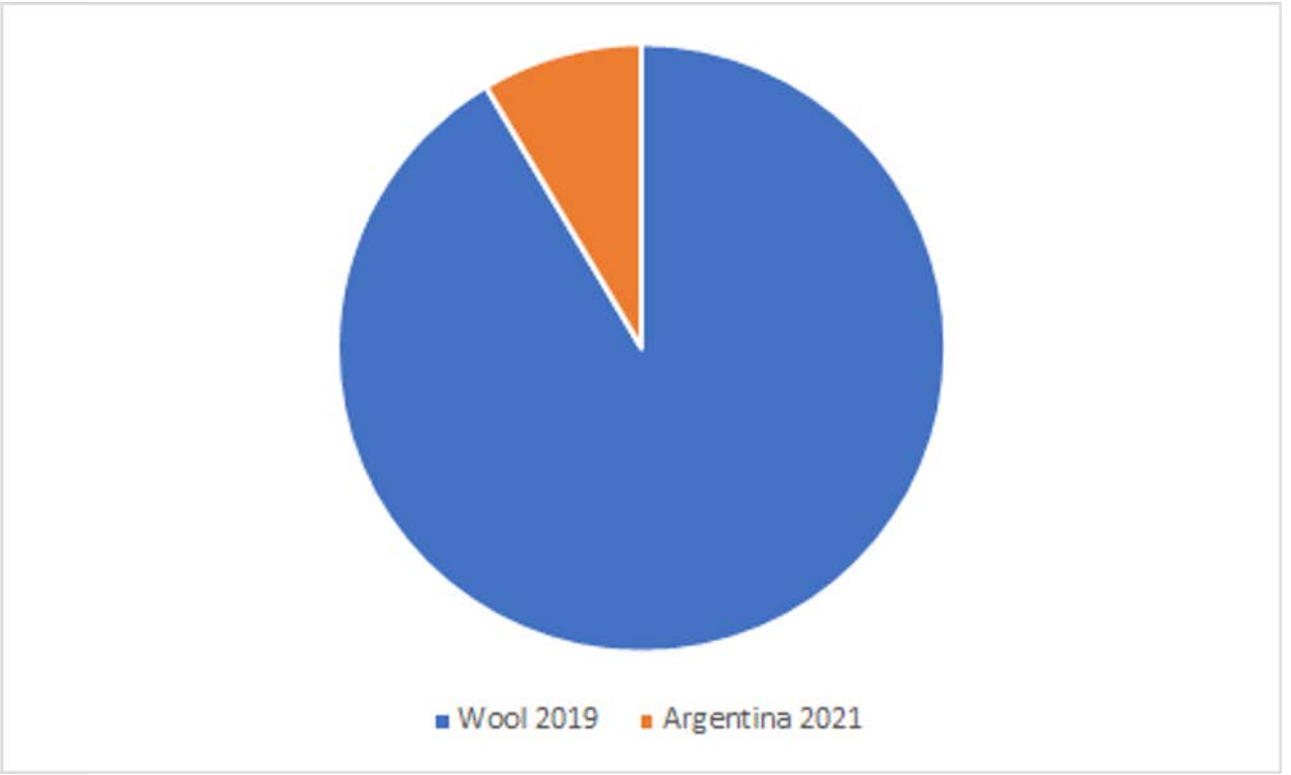
MEANWHILE...

Every three years, measure and verify the real, actual carbon accruals in the soil using an independent third-party.

More carbon goes into the soil
Native grasses are reintroduced
Sheep enjoy a more nutrient-dense diet
Waterways are protected
Stream ecosystems are preserved

native energy
A Public Benefit Corporation





native energy
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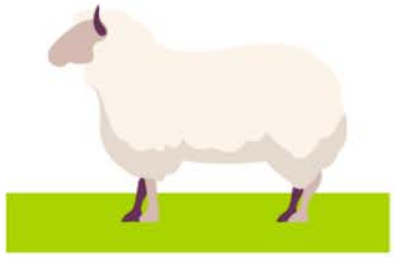

PROJECT STALLED

Funding gap prevents project from being built

Individuals & Businesses

OUR FINANCIAL COMMITMENT TO PROJECT

Upfront investments in communities important to you

PROJECT GETS BUILT

With upfront funding, project moves forward

BENEFITS FROM PROJECT

Carbon offsets
Soil health
Value to brand and reputation
Grower resilience
Make a difference
Sustainable community

native energy

A Public Benefit Corporation

Question + Answer

Virtual 2020 Textile Sustainability Conference

Join us on November 2-6, 2020

Register today: TextileExchange.org/2020-Conference

Conference tracks, include Biodiversity, Climate Action, Circularity Transparency, Standards & Certifications, Preferred Fiber & Materials

Virtual Exhibit booths are still available!

Animal Fibers and Materials Round Table

- December 7, 10 am EST - 12 pm EST

- This Round Table will set the frame for the specific Round Tables that will focus on animal derived fibers and materials.

- Register here: https://zoom.us/webinar/register/WN_TkzgOosHQwyJpyKaxnYQTQ

Responsible Alpaca/Mohair/Wool Round Table

- December 17, 10 am EST - 12 pm EST

- The Responsible Alpaca, Mohair, and Wool Round Table is intended to guide and support the respective associated Standards. This group is comprised of stakeholders across the industry, including brands and retailers, suppliers, producers, animal welfare experts, and land management experts.

- Register here:
- https://zoom.us/meeting/register/tJMtde6tqDgtE9W_rDJhCbKkUcNfMV__paBX

- *(All participants are encouraged to join the Animal Fibers and Materials Round Table on Dec. 7.)*

Thank you

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