



# Science Based Targets for the Apparel Sector: Issues and Insights

February 13, 2018



# Science-based Targets for the Apparel Sector

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# Science-based Targets for the Apparel Sector

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## Agenda:



Science Based Targets for Apparel  
Michael Sadowski, WRI

Laying the Foundation  
Tim Greiner, Pure Strategies

Driving Change  
Liam Salter, RESET

Q & A

# Science-based Targets for the Apparel Sector

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pure|STRATEGIES

Pure Strategies advises on corporate strategy across the product life cycle including science based targets, material health, and product design.



RESETcarbon

RESET focuses on developing and delivering environmental footprint reduction programs to corporate customers in Asia



WORLD  
RESOURCES  
INSTITUTE

WRI is a global research organization that turns big ideas into action at the nexus of environment, economic opportunity and human well-being.

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**RESET** and **Pure Strategies** are collaborating to offer Science-Based Target services to apparel brands and retailers. The benefits of our collaboration include:

- Core teams and skillsets in US and Asia
- In-depth understanding of retail and apparel businesses
- Deep understanding of operational and supply chain environmental footprinting including Science Based Carbon Targets
- Significant prior experience in apparel including Wrangler, TNF, H&M, Timberland, Walmart, NRDC Clean by Design



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# Science Based Targets Initiative

Mobilize companies to set science-based targets and boost their competitive advantage in the transition to a low-carbon economy



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# What is a Science-Based Target?

A greenhouse gas emissions reduction target aligned with the latest climate science.

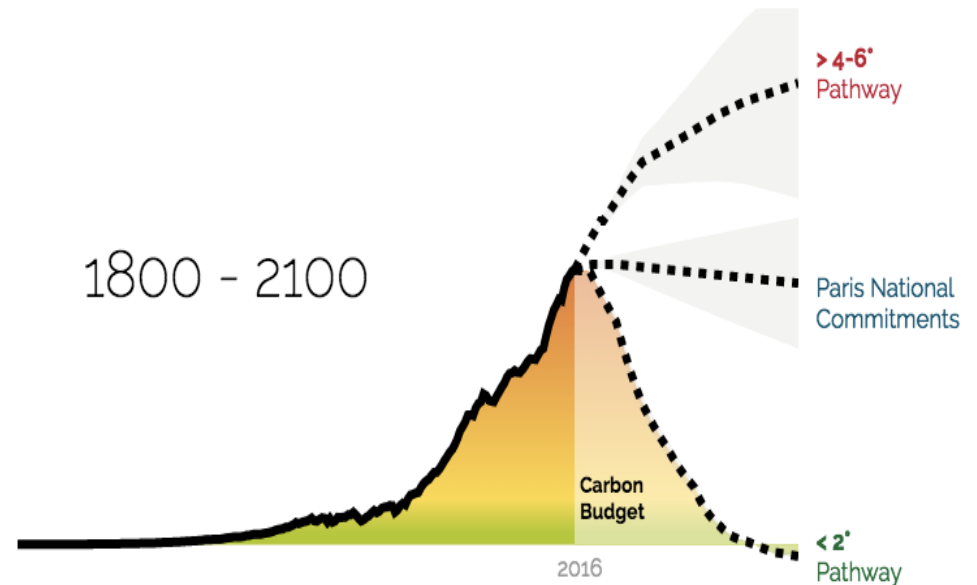
Defines how much and how quickly companies need to cut their emissions to ensure they contribute their part to the global effort to prevent dangerous climate change.

Gives companies a clear vision of where they need to be in the future, challenging them to transform their businesses and create a low-carbon economy in which they can thrive.

# What Level of GHG Reductions Are Needed?

According to the IPCC, global GHG emissions must be cut by between 49 and 72% from 2010 levels by 2050 to stay within a 2°C global temperature increase.

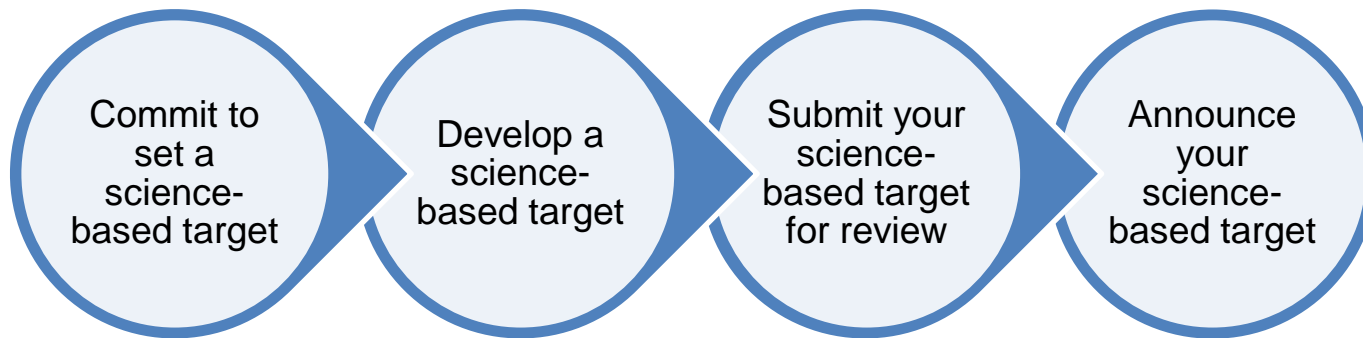
([Clarke et al, 2014](#))





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# SBTi Call to Action: A Four-Step Process



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# SBTi Call to Action Eligibility Criteria (All 5 Needed)

## 1. Boundary

Covers company-wide scope 1 and scope 2 emissions and all GHGs as required in the GHG Protocol Corporate Standard.

## 2. Timeframe

Commitment period must cover a minimum of 5 years and a maximum of 15 years from the date the target is submitted for an official quality check.

## 3. Level of ambition

At a minimum, the target will be consistent with the level of decarbonization required to keep global temperature increase to 2°C compared to pre-industrial temperatures, though we encourage companies to pursue greater efforts towards a 1.5° trajectory.

Intensity targets are only eligible when they lead to absolute emission reductions in line with climate science or when they are modelled using an approved sector pathway or method (e.g. the Sectoral Decarbonization Approach).

## 4. Scope 3

Companies must complete a scope 3 screening for all relevant scope 3 categories in order to determine their significance per the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

An ambitious and measurable scope 3 target with a clear time-frame is required when scope 3 emissions cover a significant portion (greater than 40% of total scope 1, 2 and 3 emissions) of a company's overall emissions.

The target boundary must include the majority of value chain emissions as defined by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard

## 5. Reporting

Disclose GHG emissions inventory on an annual basis.

# Why Apparel and Footwear

\$2.4 Trillion

The fashion industry is large and growing

2X

Global clothing production doubled between 2000 and 2014.

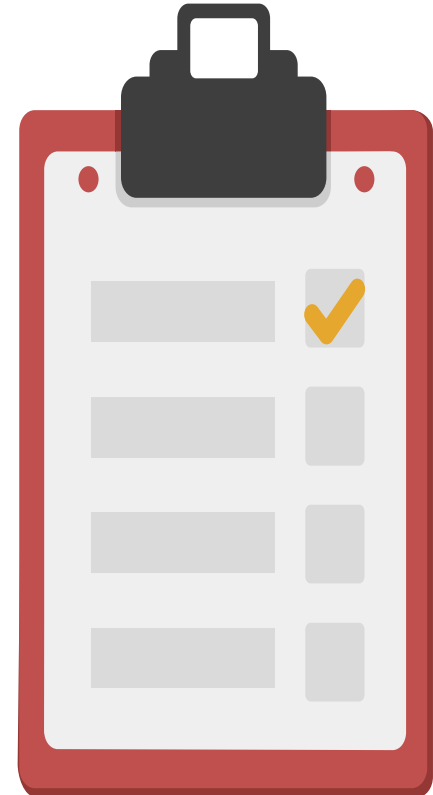
1/2

Consumers keep almost every type of apparel only half as long as they did 15 years ago.

Sources: [McKinsey & Company](#) and [The Economist](#)

# Objectives of the Guidance

- ✓ Identify barriers for apparel and footwear companies to set SBTs and provide recommendations to address these barriers
- ✓ Create specificity and consistency in how apparel companies set SBTs, where possible
- ✓ Define and provide examples of best practices
- ✓ Explore opportunities for companies to collaborate in reducing emissions



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# Scope of the Guidance

- I. Business case for AP & FW companies to set SBTs**
- II. How to choose a SBT setting method**
  - a. Pros and cons of each method
  - b. Criteria for choosing a method
- III. How to set a SBT (scope 1 and 2 emissions)**
  - a. Determining the boundary
  - b. Choosing a base-year and target year
  - c. Absolute vs intensity targets
  - d. Choosing a metric for intensity targets
- IV. How to set a scope 3 target**
  - a. Options for types of scope 3 targets
  - b. Determining an appropriate level of ambition
  - c. Choosing a target boundary
  - d. Collecting high quality data to enable performance tracking – activity data and emissions factors
- V. Best practices for setting emissions targets**
- VI. Engaging with suppliers to effectively drive scope 3 emissions reductions**

# SBTi Apparel and Footwear Sector Approved Targets



Kering commits to reduce scope 1, scope 2 and scope 3 emissions from upstream transportation and distribution, business air travel and fuel-and-energy related emissions 50% per unit of value added by 2025 from a 2015 base-year.

In addition, Kering commits to reduce scope 3 emissions from purchased goods and services 40% per unit of value added within the same timeframe. This is part of their overall goal to reduce environmental impacts upstream, such as air emissions, water use, water pollution, land use change and waste.



Marks & Spencer commits to reduce absolute scope 1 and 2 greenhouse gas emissions 80% by 2030 below 2007 levels and has a longer term vision to achieve 90% absolute emissions reductions by 2035, below 2007 levels.

Marks and Spencer also commits to reduce scope 3 emissions by 133 MtCO<sub>2</sub>e between 2007 and 2030.



Wal-mart Stores, Inc. commits to reduce absolute scope 1 and 2 emissions 18% by 2025, from 2015 levels.

Walmart will also work to reduce CO<sub>2</sub>e emissions from upstream and downstream scope 3 sources by one billion tonnes between 2015 and 2030.

# SBTi Apparel and Footwear Sector Committed Companies

ALDO  
GROUP

asics



EILEEN  
FISHER



GUESS

H&M

INDITEX



OJG  
ONE JEANSWEAR GROUP



YKK



# Project Timeline

June '17

Nov '17

Jan '18

Sept '18

Dec '18

**Project Scoping and Development**

**Develop Options Papers**

**Develop Guidance**

**Publish and Market Guidance**

Webinar & WFSGI presentation

Develop project plan

Recruit members for EAG & SAG

1:1 interviews w/ committed companies & experts

EAG call on tech options (Nov 8)

SAG call on tech options (TBD)

Final draft of tech options

First draft outline of guidance

EAG call on outline (Feb 15)

First draft of guidance (spring '18)

Second draft out for review

Final guidance ready

Develop launch and outreach plan

Launch guidance



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# We Welcome Your Feedback and Participation

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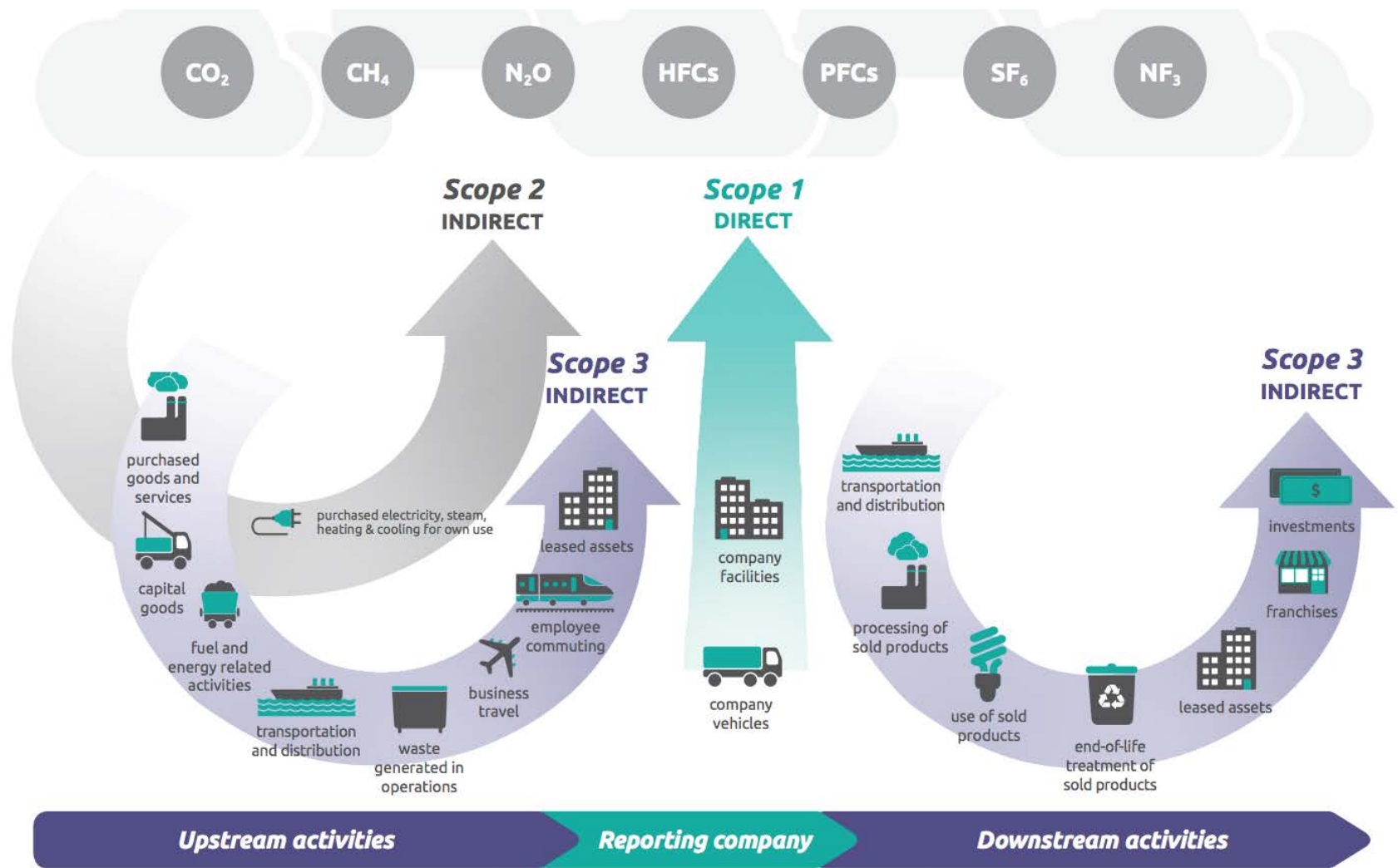
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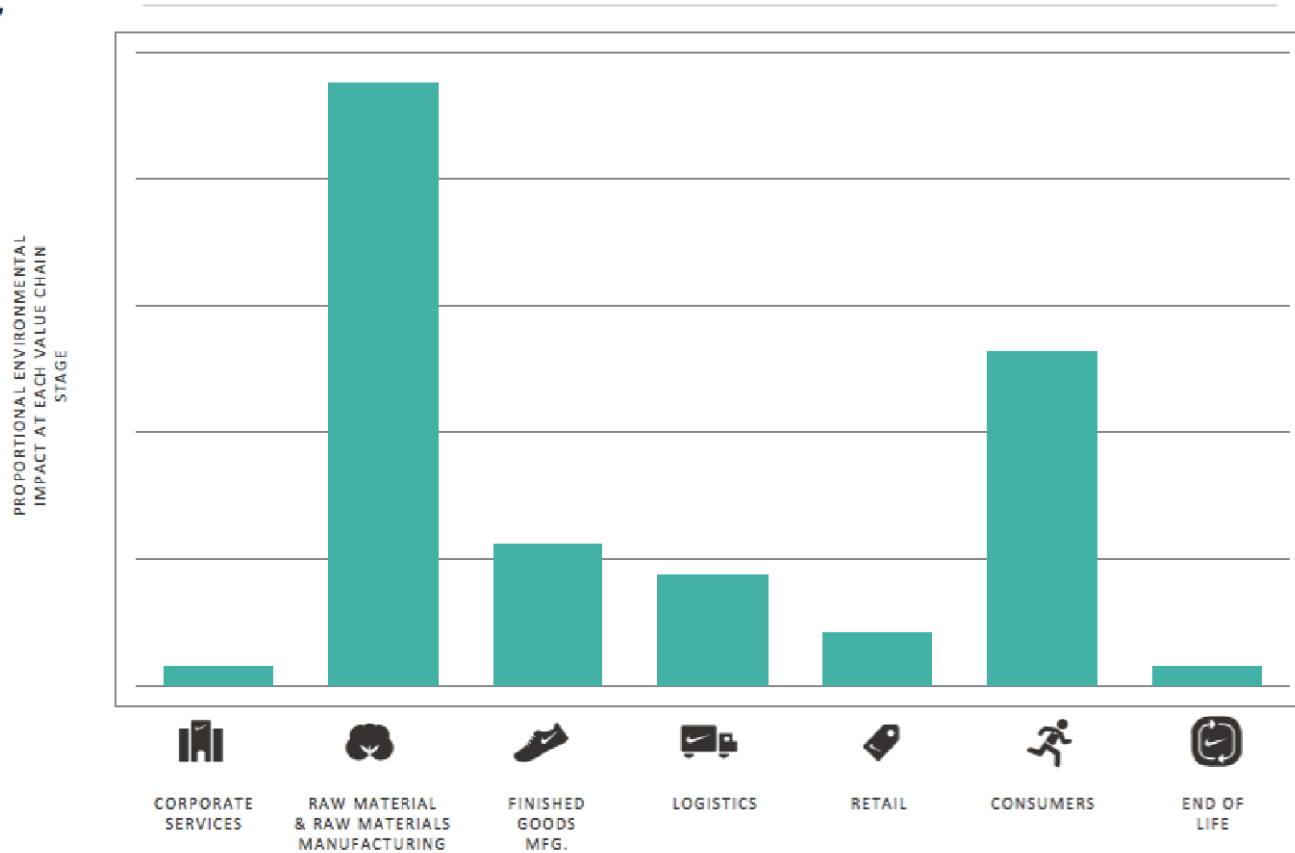
Q & A

# Understanding Scopes 1, 2 & 3

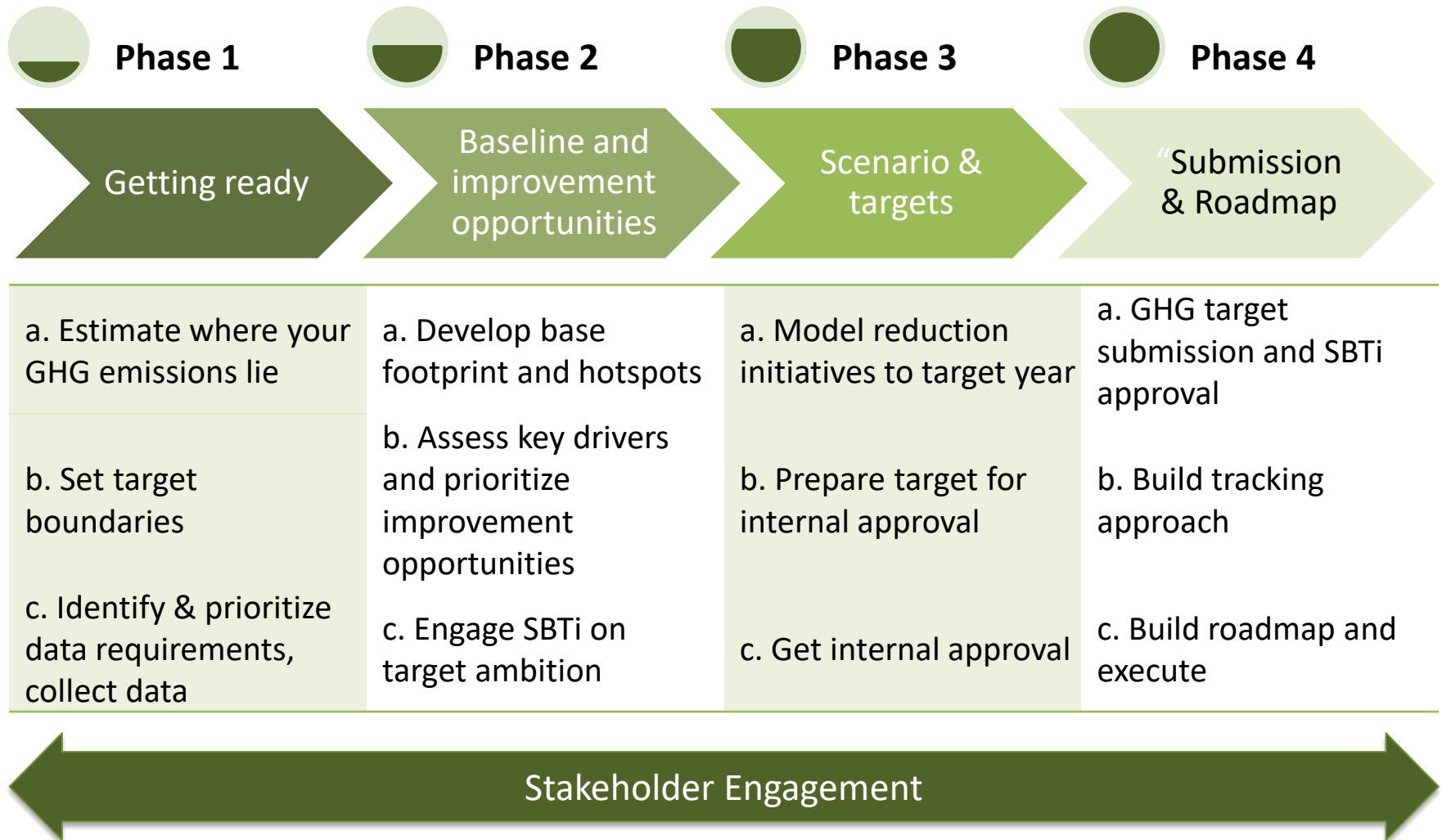


# What Does Scope 3 Look Like?

## NIKE'S CARBON HISTORY



# The target setting process



# Scope 3 - Data Mapping & Target Requirements

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- Assess scope 3 emissions to determine if > 40% of value chain emissions
  - 15 Scope 3 categories
  - If >40%, must develop a target covering at least 2/3 of scope 3 emissions or top 3 Scope 3 categories
- Filling data gaps
  - Use online Scope 3 Evaluator tool for gaps <http://www.ghgprotocol.org/scope-3-evaluator>
  - Leverage any existing corporate scope 3 inventory from Higg and other sources
  - Accessing internal data on fabric sourcing types, piece volumes, spend, etc.
  - Secondary emission factors from life cycle inventory databases, Higg MSI and World Apparel Lifecycle Database and life cycle studies (e.g., Levis)
  - Government agencies (e.g., WRAP)
- Target should be ambitious but need not follow a science-based reduction pathway

# Scope 3 Targets

## Hierarchy of SBT Scope 3 targets

1. % absolute emissions targets (in line with 2-degree pathway when possible) or intensity target based on the sector decarbonization approach (SDA)
2. Emissions-based intensity targets
3. Non-emissions targets in absolute or intensity terms such as reducing kWh or reducing energy use per product
4. Targets that influence behavior of suppliers or customers (e.g., request suppliers to set SBT, educate customers on cold water washing)



Source: WRI

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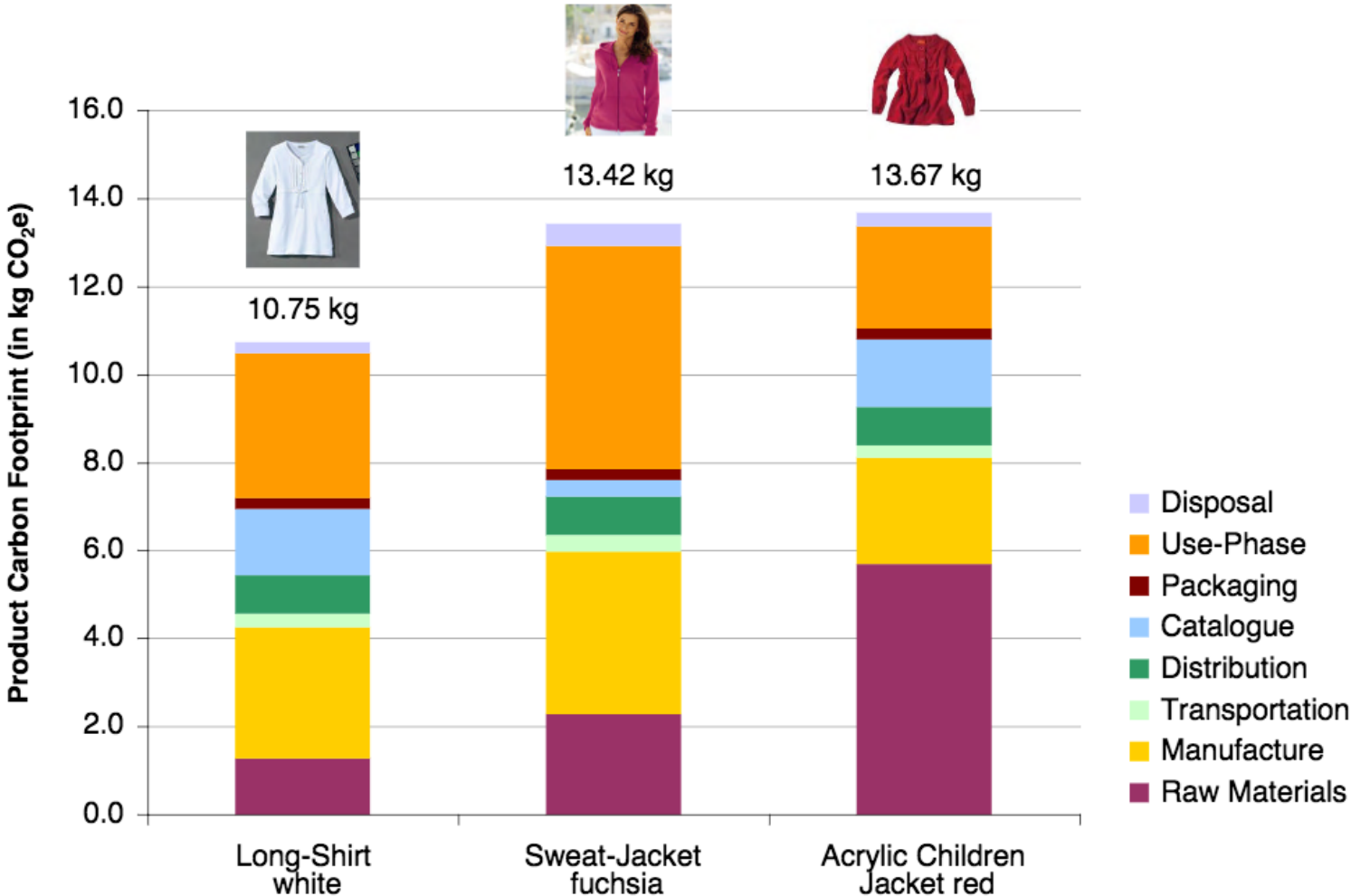


# Driving Change

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- For most sectors SBTs are demanding and driving innovation within businesses
- Currently scope 3 requirements are very non-specific meaning scope 3 commitments are not as ambitious or robust as scope 1 and 2
- The minimum threshold allowed for apparel scope 3 will determine whether SBTs drive innovation or become a tool for certifying higher quality incremental programs and pilots.
- One example is data quality where traditional methods of data collection and verification deliver limited accuracy and insight into emissions performance trends

# Further examples



[http://www.ci-romero.de/fileadmin/media/informieren-themen/gruene\\_mode/Jungmichel.\\_Systain.pdf](http://www.ci-romero.de/fileadmin/media/informieren-themen/gruene_mode/Jungmichel._Systain.pdf)

# Scope 3: Supply chain opportunities

	Examples of reduction opportunities	Carbon reduction – indicative impact
Raw Materials	BCI cotton	5-20% of cotton emissions
	Cotton country of origin	Up to 50% of cotton emissions
	Recycled cotton	Up to 64% cradle to gate reductions (100% content)
Manufacturing	Bio-polyester	Up to 18% fabric reductions
	Manufacturing energy efficiency	15 – 20% of factory emissions
	Renewable energy	5 – 50% of factory emissions
	Process improvement	e.g. cold pad batch = 13% of fabric production emissions low water wash = up to 10% of cradle to gate emissions CO <sub>2</sub> dyeing = 60% process energy savings
Product design	Lightweight fabric	62% reductions from low weight nylon

# Aggregating opportunities

BCI

rPET

Dyeing  
process

Washing  
process

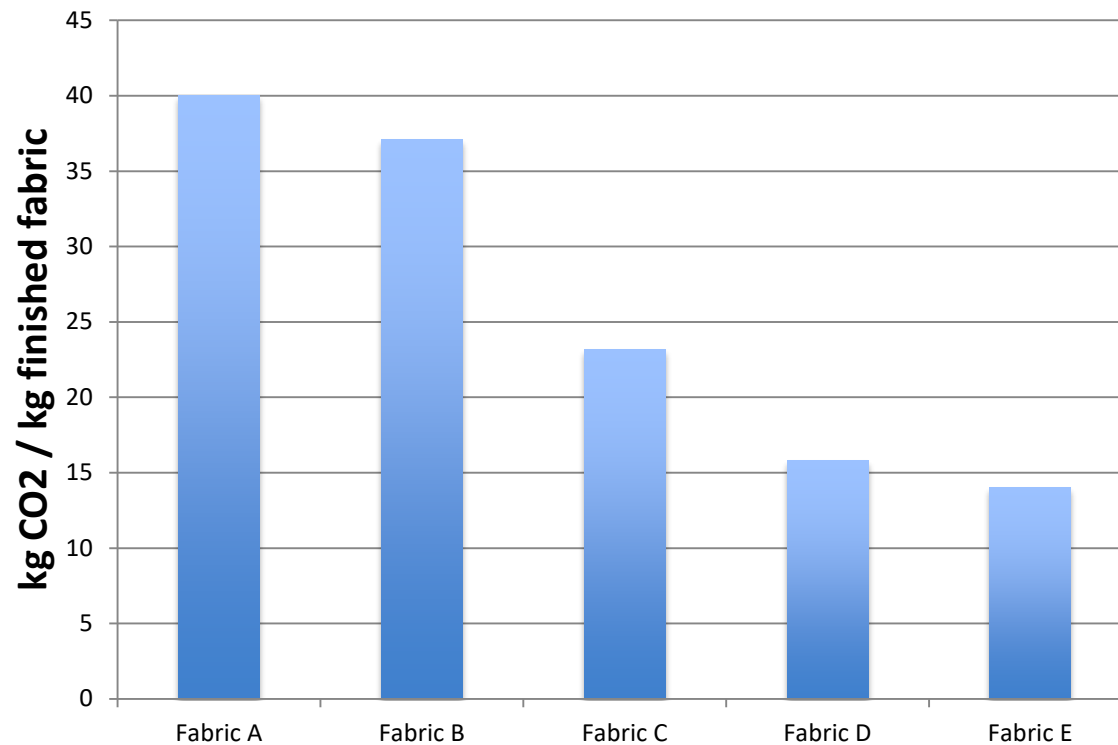
FROM THIS GARMENT  
WE **Re**DUCE CARBON 40%  
ENERGY 25%  
WATER 17%

**Lee**<sup>®</sup>

<https://www.youtube.com/watch?v=sNvijJcojZI>

# Example: Fabric Selection

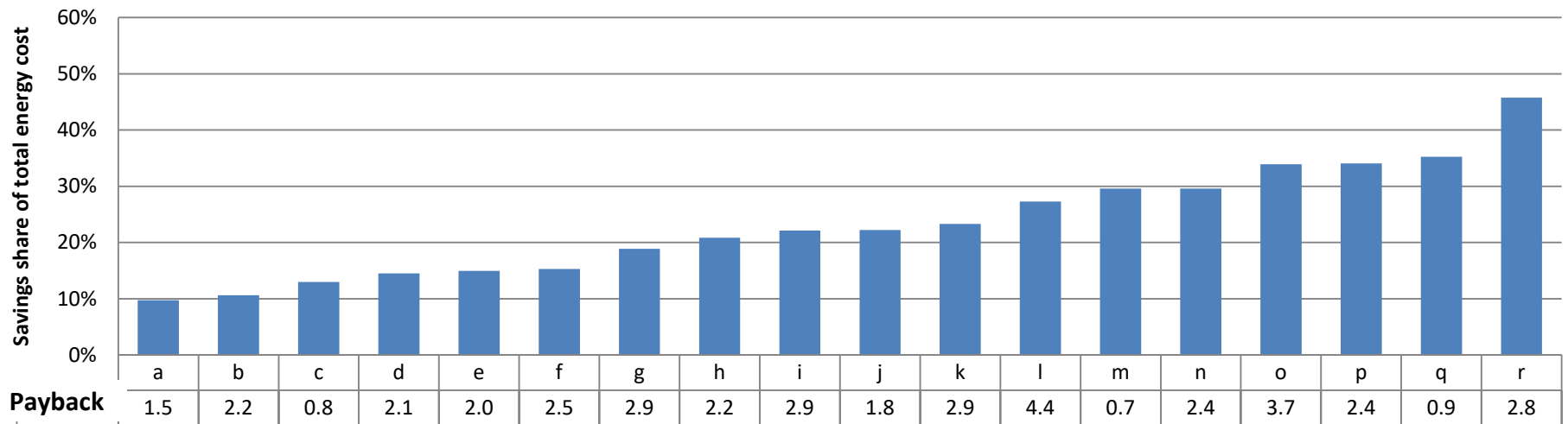
**Case study:** Selected finished fabric carbon emissions from synthetic fibre per kg of product from a single vertical site



# Example: Energy efficiency

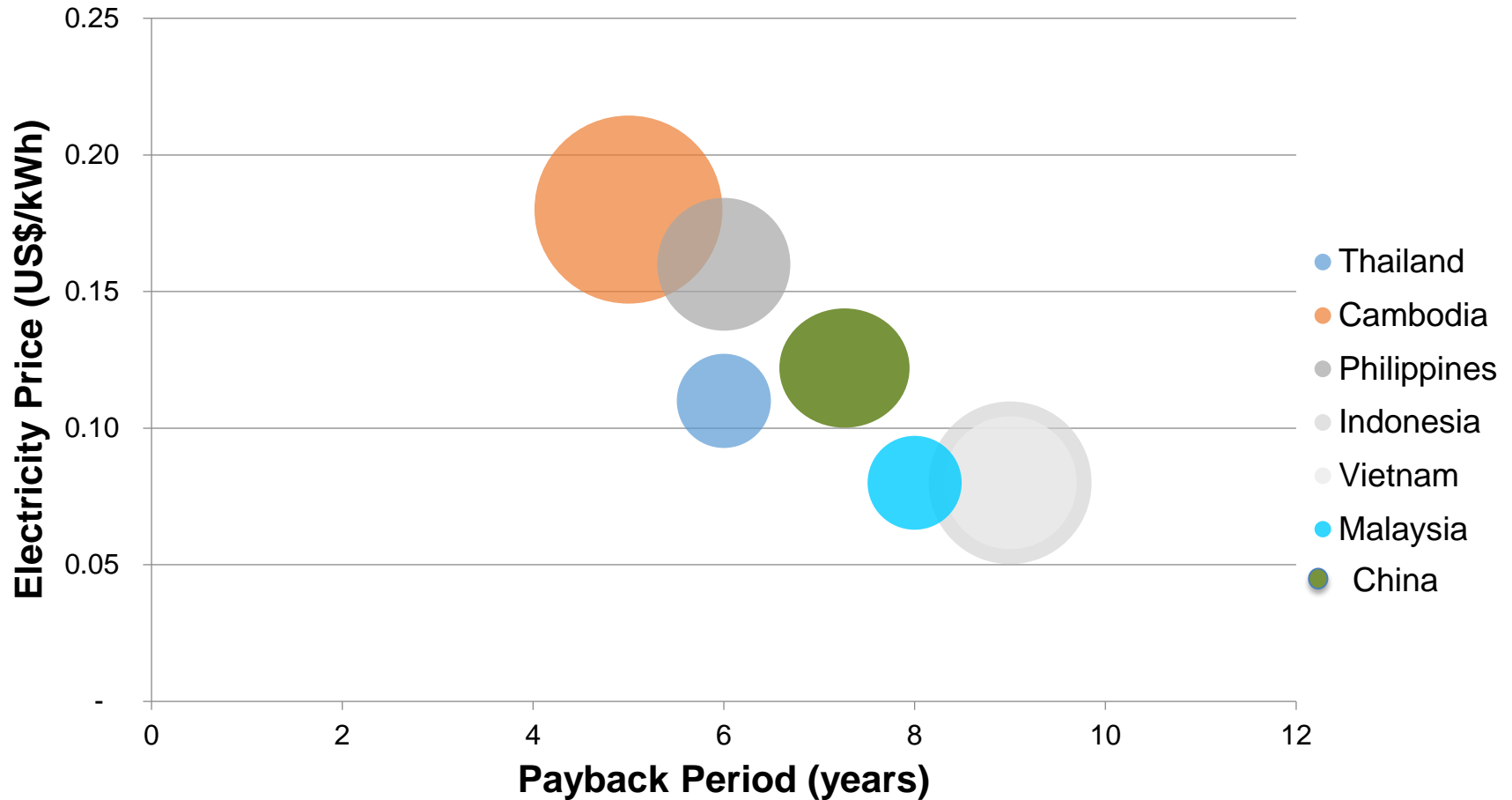
**Case study:** Energy savings potential from apparel tier 1+2 portfolio in SE Asia 20% average savings potential, < 2.5 years average payback

**Energy savings potential from apparel tier 1+2 portfolio in SE Asia payback**



# Example: Onsite solar

**Case study:** Solar rooftop payback ranges from site level assessment and supplementary market data



# Example: Offsite power purchase agreements

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- Evolving policy and regulations to support offsite corporate procurement of renewable energy are moving fast in major apparel sourcing markets such as China, India and Vietnam
- Offsite agreements will provide suppliers with opportunities to source grid discounted power with bundled renewable energy attributes
- Supplier scale is likely to be a major barrier to procurement which could be potentially address by brands acting as aggregators



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# Questions & Answers

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## THANK YOU

