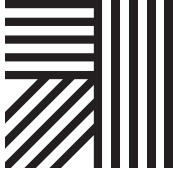


# ANNUAL IMPACT REPORT 2020

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- WEBSITE [apparelimpact.org](http://apparelimpact.org)
- INSTAGRAM [@apparelimpactinstitute](https://www.instagram.com/apparelimpactinstitute)
- FACEBOOK [@apparelimpactinstitute](https://www.facebook.com/apparelimpactinstitute)
- TWITTER [@apparelimpact](https://twitter.com/apparelimpact)
- LINKEDIN [@apparel-impact-institute](https://www.linkedin.com/company/apparel-impact-institute)
- YOUTUBE [Apparel Impact Institute](https://www.youtube.com/ApparelImpactInstitute)

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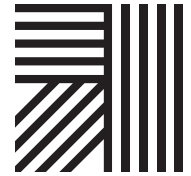
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## DEAR FRIENDS,



During the past three years, I have led the Apparel Impact Institute, founded in late 2017 by Sustainable Apparel Coalition (SAC); IDH, The Sustainable Trade Initiative; Natural Resource Defense Council (NRDC) and Target Corporation. In the first three years of start-up and organizational development, Arvind Ltd., Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Gap Inc., HSBC Holdings plc, PVH, Schmidt Family Foundation and Stichting DOEN joined us in our effort to strategically drive proven sustainability solutions, with measurable positive impact, in the apparel and footwear industry.

From the beginning, our goal has been to serve as a solutions-oriented industry partner that could aggregate brands, manufacturers and industry stakeholders to identify, fund and scale high-impact projects that would drive toward industry targets — such as boosting energy efficiency and lowering the carbon footprint of the industry, while measuring these outcomes.

In these first few years, we have worked closely with leading programs in the industry, including IDH, NRDC, Solidaridad and Swedish Water Textile Initiation (SIWI) by creating a *Mill Improvement Alliance* to bring programs into a more standardized approach with common pricing, measurements, tools and recruitment. We integrated the proven *Clean by Design* program with our mill improvement program to scale the level of impact achieved by our partner brands and manufacturers.

Our work was moving forward quickly when the COVID-19 pandemic made everyone see the world differently. We realized it was necessary to identify and scale a suite of programmatic solutions that would enable the industry to achieve the goals set by the Science Based Targets initiative (SBTi). Although our mill impact work continued during 2020, and new facilities implemented programs, we took the time to engage in foundational understanding of the industry. Working with the World Resources Institute (WRI), we developed the *Climate Roadmap Research Project*, funded by Laudes Foundation, which resulted in the *Apparel and Footwear Sector Roadmap to Net-Zero Emissions* (“*The Roadmap to Net-Zero*”) report, published in the Fall of 2021. The report provides a deep understanding of the seven specific focus areas where we can most successfully and meaningfully scale impact solutions and informs us about the opportunities for collective action, as well as the potential live space where programs need to be tested and piloted to create a model for sustainability. (See graphic on page 24 to view the 7 levers of climate change necessary to the industry.)

We are pleased to present this 2020 impact report on programs that continued running or launched during a year when our organization and the world was reacting to life in a global pandemic. Although 2020 was not as progressive a year as one might expect with respect to the number of facilities reached, we offer this first impact report as a baseline as we move forward through this decade toward successfully meeting the 45% carbon emissions reduction goal as aligned with the UNFCCC Climate Charter for Fashion and the Science Based Targets initiative in order to remain under 1.5 degrees celsius temperature increase. In future years, we anticipate our impact report will include aggregate industry results coming from our ‘alliance’ partners and other key stakeholder programs in which we partner.

Through collective action with our ‘alliance’ partners, Sustainable Apparel Coalition, Textile Exchange and ZDHC, who are part of this industry-wide mission, we look forward to driving ever greater proven impact solutions. Many others are helping to drive positive change for the industry.

As we are coming toward the end of 2021, Aii has already expanded beyond the result included in this report. Within each program section, we have added a “what’s next” category to provide a glimpse of what we have begun building in this new year.

Thank you for joining us in this vital work.

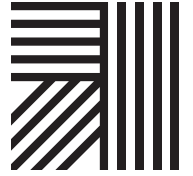
**Lewis Perkins**  
President, Apparel Impact Institute

Lewis B. Perkins





# VISION AND MISSION



## **Our Vision**

A transformed apparel, footwear, and textile industry that has a positive impact on people and planet.

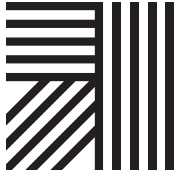
## **Our Mission**

We identify, fund and scale proven quality solutions to accelerate positive impact in the industry.

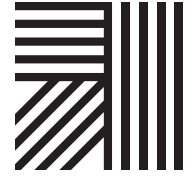




# OUR HISTORY



# OUR STAKEHOLDERS



## INTERNAL STAKEHOLDERS

Aii partners internally with key stakeholders to strategically drive our work.

### **Apparel Impact Roundtable:**

The Apparel Impact Roundtable (AIR) is a strategic advisory body comprising brands, retailers, and manufacturers responsible for driving the strategic scale and implementation of sponsored initiatives. Artistic Milliners, Arvind Ltd., Gap Inc., PVH and Target Corporation.

### **Mill Improvement Alliance:**

Aii collaborates with Mill Improvement Alliance members to standardize criteria and tools for impact program implementation. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); IDH, The Sustainable Trade Initiative; Solidaridad Network; Stockholm International Water Institute (SIWI) and ZDHC.

**Carbon Leaders:** Aii collaborated with RESET Carbon to launch the Carbon Leadership Project, which merges the efforts of multiple apparel brands working to reduce their carbon output within their supply chains. These industry-leading brands are now using collective action to tackle carbon in the apparel supply chain where the biggest positive impacts can be made. AEO Inc., C&A, Columbia, Gap Inc., lululemon, Nike, PVH and Target Corporation.

## EXTERNAL STAKEHOLDERS

Aii partners with many external stakeholders, and below are a few key groups.

**Eco System:** Aii is part of a three-organization ecosystem with the Sustainable Apparel Coalition (SAC) and Higg Co. Each organization serves a unique purpose to advance sustainability within the industry, and through collaboration, we bring together the apparel industry, measure the supply chain impact and scale improvement programs globally.

**Alliance:** Apparel Impact Institute (Aii), the Sustainable Apparel Coalition (SAC), Textile Exchange and ZDHC formed a partnership in 2020 to accelerate impact and drive new efficiencies for the industry. Based on their core competencies and complementary efforts, the organizations have formed an alliance of resources and offerings for the global value chain.

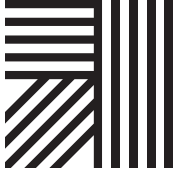
**Strategic Implementation Partners:** By engaging key implementers globally, Aii is able to leverage the expertise of organizations, such as cKinetics, Legambiente, RESET Carbon and Sustainable Textile Solutions.

**Fashion Conveners:** Apparel Impact Institute (Aii), Fashion for Good (FFG), Fashion Industry Charter for Climate Action, Fashion Makes Change (FMC), Global Fashion Agenda (GFA), Responsible Business Coalition at Fordham University (RBC), Sustainable Apparel Coalition (SAC), Textile Exchange (TE) and ZDHC announce a new collaboration. Collectively recognizing the importance of setting an ambitious vision to drive change and action, the Fashion Conveners work to support common organizational agendas, avoid duplicative efforts, and holistically drive the industry's progress along a journey of continuous and rapid movement.

**Industry Association Partnerships:** Through relationships with like-minded industry associations, working groups and organizations, Aii conducts meaningful research, identifies vulnerabilities and works to accelerate action with an ultimate focus on reducing carbon emissions in the apparel industry by 45% by 2030. In this effort, Aii collaborates with partners including Fashion Pact, NRDC (Natural Resources Defense Council), UNFCCC (United Nations Framework Convention on Climate Change) and World Resources Institute (WRI).



# OUR PARTNERS



## BRAND, RETAIL & MANUFACTURER PARTNERS



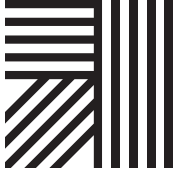
These are just some of our brand, retail and manufacturer partners in 2020. A full list can be found on our website.

## PHILANTHROPIC PARTNERS



\* added in 2021

# OUR WORK



**WE ARE DATA DRIVEN AND SCIENCE BASED** Working within a recognized framework of Tiers and Levers, Aii identifies, funds and scales to drive carbon, water and chemical emissions reductions for maximum impact.

## Identify

We identify and validate the best teams, initiatives, and market opportunities to deliver environmental impact at scale, through both new and existing programs.

## Fund

We apply unique financial models across our program areas to build a pipeline of scalable impact in the apparel and footwear industry.

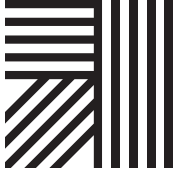
## Scale

We defragment, de-risk, coordinate and streamline the multitude of programs into a coordinated and scalable pipeline of program offerings.





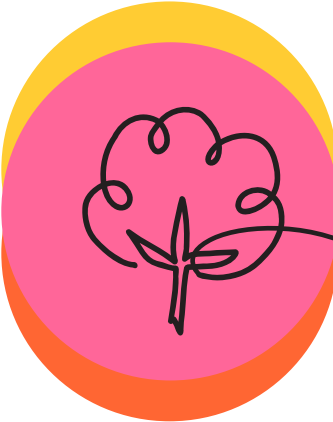
# SUPPLY CHAIN TIERS



Aii's work in 2020 focused primarily on Tiers 1 and 2, which refers to a type of facility and references its place in the supply chain.

## Tier 4

**Raw Material Extraction**

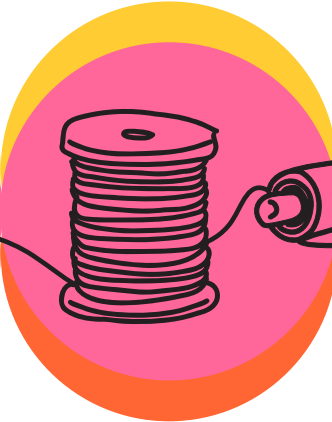


24%  
carbon emissions



## Tier 3

**Raw Material Processing**

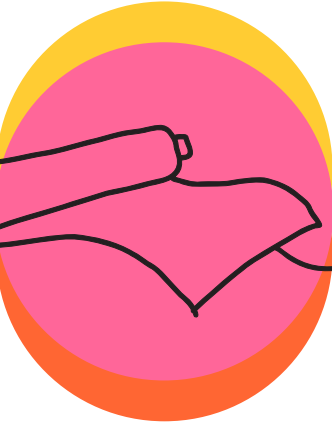


15%  
carbon emissions



## Tier 2

**Material Production**

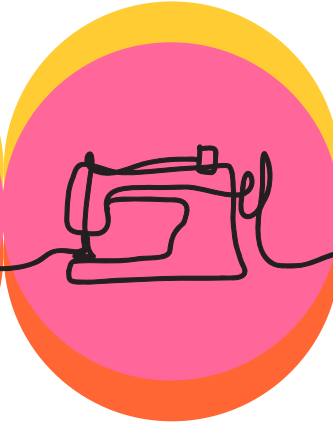


52%  
carbon emissions



## Tier 1

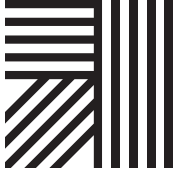
**Finished Product Assembly**



9%  
carbon emissions



# INTRO TO PROGRAMS



When I joined Aii in 2017, I set out to align and integrate existing impact initiatives through the lens of the highly successful Clean by Design program.

At that time, we hosted industry-leading impact programs to bring together the best-in-class approaches for driving water, energy and chemical savings at wet processing facilities, from which, we developed a stepwise framework for prioritizing, identifying and building programs along with our strategic partners. Aii now leverages the legacy program methodology of Clean by Design to support apparel and footwear facilities of any size, type and location to achieve measurable environmental impact reductions.

### **Our Approach**

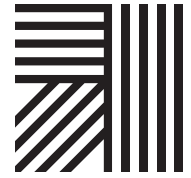
At Aii, we lean on a network of leading industry experts to guide both brand and manufacturing partners through a multi-year framework of target setting and continuous improvement. Our work brings together a community of practitioners who focus on scaling proven strategies for improving operational and environmental efficiency. In doing so, our partners share experience, learnings and resources along the way to achieving quantifiable results.

In 2020, we, like all organizations, felt the challenges brought on the industry by COVID-19. I am deeply proud of our nimble team and committed partners who showed incredible perseverance throughout the year. And in doing so, we are pleased to share results from our 2020 programs, as well as historical data in this section. We also offer a look ahead to some of the programs and projects we have launched in 2021 and those that are ahead in the future as we focus on meeting the industry’s climate, water and chemicals management aspirations.

**Kurt Kipka**  
Vice President







# OUR 2020 OVERALL PROGRAM RESULTS

## EXPANDING IMPLEMENTATION NETWORK:

Aii partnered with **2 global program managers** and **6 technical experts** to deliver cohort programming in **India, Italy, Mainland China, Pakistan, South Korea, Taiwan region** and **Vietnam**.

Total GHG emissions (cumulative 2011 - present):

# 380,000 TONNES

AN AVERAGE OF 9.8% REDUCTION PER FACILITY

Total water reduced (cumulative 2011 - present):

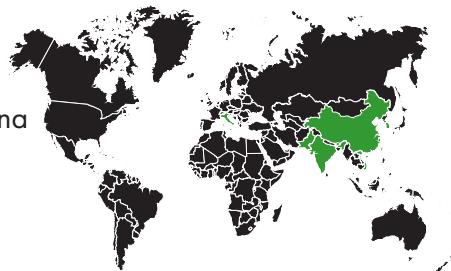
# 12,000,000 CUBIC METERS

AN AVERAGE OF 12.9% REDUCTION PER FACILITY

## TOTAL COUNTRIES WITH PROGRAMMING:

# 7

India  
Italy  
Mainland China  
Pakistan  
South Korea  
Taiwan region  
Vietnam



## GROWING PROGRAM PIPELINE:

Aii DEPLOYED

# 5 programs

WITH

# 20 brands

AND

# 105 manufacturers

DURING 2020

Total **number of brands** with active programming in 2020

# 20

Total number of facilities that **started a program** in 2020

# 20

Total number of facilities in an **active program** in 2020

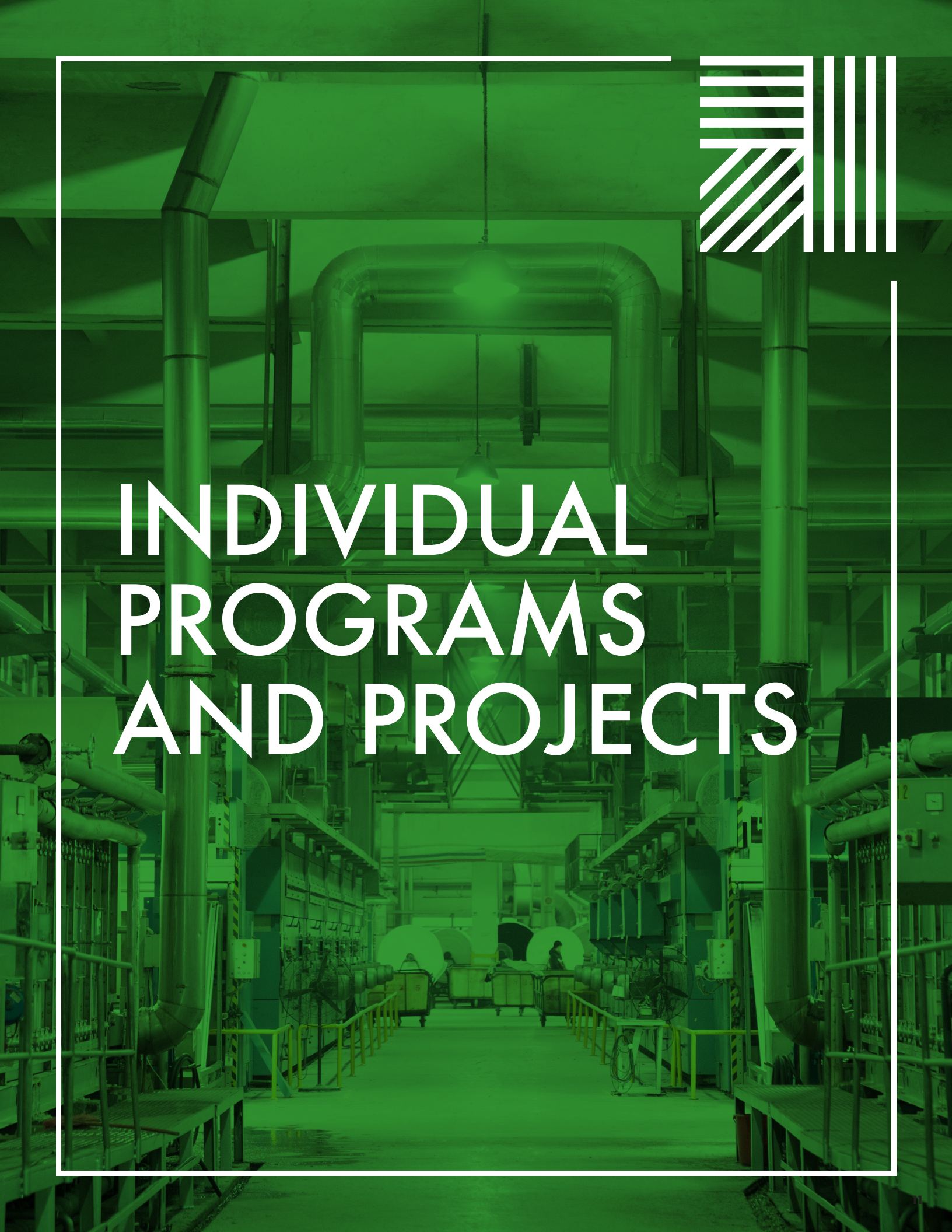
# 105

Total number of facilities that have **completed a program** (2011-2020)

# 160+



# INDIVIDUAL PROGRAMS AND PROJECTS





# CLEAN by DESIGN

## (Inaugural Aii Program) Energy & Water Efficiency for Stage 1 Tier 2 program (CbD S1T2)



CLEAN by DESIGN - (Inaugural Aii Program) Energy & Water Efficiency for Stage 1 Tier 2 program (CbD S1T2) - Developed to capture low-hanging fruit improvements, resulting in 10% energy and 20% water reductions on average.

[To Learn More Click Here](#)

### Description

Clean by Design (CbD S1T2) is Aii's inaugural program that captures low-hanging fruit efficiency improvements. It is a stage 1 (S1) program focused on Tier 2 (T2) wet-processing facilities that results in 10.6% energy and 12.9% water reductions on average.

### Overview / Context

The Natural Resources Defense Council (NRDC) created Clean by Design in 2007 after identifying efficiency in Tier 2 wet-processing facilities as an opportunity for water- and energy-use reductions in the apparel supply chain. The Apparel Impact Institute adopted the highly successful program in 2018 and continues to scale the program.

BRANDS IN ACTIVE PROGRAMMING IN 2020

**8 brands**

MILLS THAT COMPLETED PROGRAMS IN 2020

**30**

**GHG REDUCTION**  
% emissions reduction

**10.35**  
%

**WATER SAVINGS**  
% water reduction

**7.69**  
%

**ENERGY SAVINGS**  
% energy reduction

**10.13**  
%

# CLEAN by DESIGN

## (Inaugural Aii Program) Energy & Water Efficiency for Stage 1 Tier 2 program (CbD S1T2)



The cornerstone of Clean by Design (CbD) is a set of 10 Best Practices that when implemented in any production facility can deliver almost immediate return on investment – most projects pay for themselves in less than one year. These foundational elements of resource management represent the beginning and ongoing steps all wet-processing mills can adopt for optimal efficiency, and they pave the way for more sophisticated projects when the facility is ready. Clean by Design and expert partners evaluate each mill based on its improvement potential, beginning with the 10 Best Practices, and then allocate them to programming suited for their level of performance.

### Results

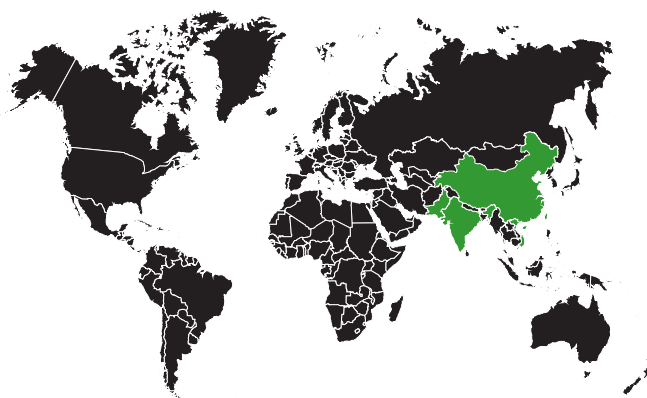
Aii is currently scaling CbD S1T2, and 26 Tier 2 facilities are in active programming in 2020. The 10 Best Practices are open sourced and available on Aii's website. Aii continues to improve tools and processes as it scales the cohort approach across India, Mainland China, Pakistan, Taiwan region and Vietnam.

### What's Next

In 2021, we are expanding cohort programming to new countries: Italy, South Korea and the United States (California) (see more detail in the FUTURE section). Aii will work closely with our programmatic and philanthropic partners to identify and fund opportunities for further expansion.

### REGIONS - WITH ACTIVE COHORT PROGRAMMING IN 2020:

India  
Mainland China  
Pakistan  
Taiwan Region  
Vietnam



### AVERAGE PAYBACK TIME in months

19.5

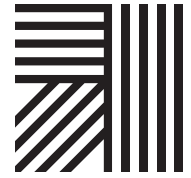
AVERAGE INVESTMENT PER MILL  
IN EFFICIENCY IMPROVEMENTS

**\$781,000**

AVERAGE ANNUAL SAVINGS PER MILL  
DUE TO EFFICIENCY IMPROVEMENTS

**\$331,000**





## WEILIAN CASE STUDY:

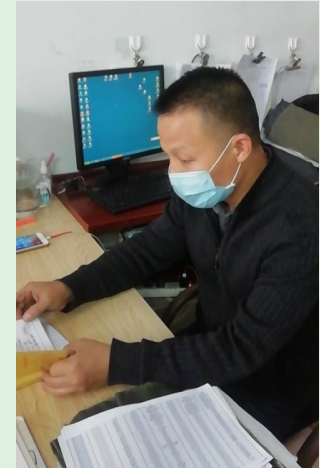
# CREATING POSITIVE IMPACT THROUGH THE CRISIS

The global pandemic has presented unprecedented challenges for businesses in the apparel and textiles industry. From cancelled orders to sick workers and store closures, companies have been faced with issues never known before at this scale. Sustainability has had to take a backseat, as companies are just trying to survive. However, some leaders have continued to prioritize sustainable development, even through the COVID-19 crisis.

Take Shandong Weilian Printing and Dyeing Co., Ltd. (also known as 'Weilian'), a factory based in Bingzhou City, China. This is one of the factories participating in Aii's Clean by Design (CbD) energy and water efficiency program for wet processing mills, which they started in 2019. As a factory that prides itself on compliance in the industry, Weilian feels they have a responsibility to take a stand when it comes to following through on its corporate social responsibility goals. They've doubled-down on their efficiency efforts and continue exploring energy conservation and environmental protection during these uncertain times.

By the time the crisis hit, Weilian had already invested time and resources in the CbD program and had gone through initial training, expert consultations and action planning. Even in an unstable environment where orders are decreasing and daily production is slowing down, Weilian hasn't wavered in its commitment to CbD program. In fact, Weilian saw the slow in production as an opportunity to further build on this work. He Xinfu, Weilian Director of Facilities said, "Believe it or not, this pause in our daily production is actually a good opportunity for us to implement needed adjustments and tests that would have been required anyway. There is a silver lining when it comes to our ability to make sustainable progress."

Up next, Weilian is focusing on steam, water, natural gas, and other high-energy resources to tackle some additional improvement opportunities identified by Clean by Design team experts. While there are many resources being dedicated to combating some of the local and global challenges of the COVID-19 pandemic, Weilian is proud to be a factory continuing this important work for sustainable impact and has plans to expand the program in additional locations in 2020 and beyond.



**"We've built our programs to capture and quantify normalized savings regardless of shifts in production. Weilian has been an impressive example of maximizing their potential for efficiency using the CbD approach and will achieve cost savings at a time when it's needed most."**

AN ZHOU  
Aii's Sr. Technical Director

# CLEAN by DESIGN +

## Energy & Water Efficiency for Stage 2 Tier 2 program (CbD S2T2)



CLEAN by DESIGN + (CbD S2T2) - Energy & Water Efficiency for Stage 2 Tier 2 program - Developed to maximize efficiency, resulting in up to 20% energy and 30% water reduction on average.

[To Learn More Click Here](#)

### Description

Clean by Design + (CbD S2T2) is a stage 2 (S2) program for tier 2 (T2) facilities and provides advanced-level energy and water reduction projects for qualified production facilities.

### Overview / Context

Clean by Design + (CbD S2T2) was developed to support wet-processing facilities "ready for more." Specifically, mills that fit any of the following criteria:

- Have previously participated in Clean by Design or comparable international program
- Have been identified by nominating brand partners as a strategic fit for the program
- Have self-identified and demonstrated advanced-level readiness

BRANDS IN ACTIVE  
PROGRAMMING IN 2020

**3 brands**

MILLS THAT COMPLETED  
PROGRAMS IN 2020

**6**

**GHG REDUCTION**  
% emissions reduction

**19.8**  
%

**WATER SAVINGS**  
% water reduction

**21**  
%

**ENERGY SAVINGS**  
% energy reduction

**48.2**  
%



# CLEAN by DESIGN +

## Energy & Water Efficiency for Stage 2 Tier 2 program (CbD S2T2)



Launched as a pilot for 7 facilities in 2019 and 2020, Clean by Design + provides participants with deeper analytical insights, target-setting methodologies and advanced-level environmental improvement opportunities. CbD+ is available to mills that have participated in traditional CbD or a similar international program OR that have demonstrated advanced performance.

### Results

This program is designed to maximize water and energy efficiency for participating mills. Pilot participants are expected to save 21% water and 48.2% energy on top of already established savings.

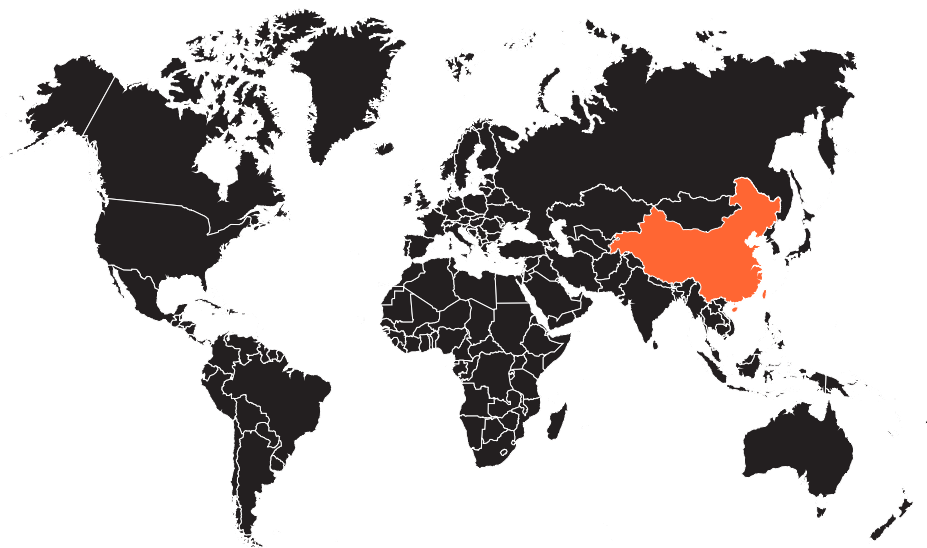
### What's Next

In 2021, Aii will further prepare the CbD+ program for global availability and deployment. We'll expand the methodology to all geographies where recurring cohort activities currently exist and partner closely with our licensed service providers to expand the pilot's success on a global scale.

**REGION:** Mainland China

**AVERAGE  
PAYBACK TIME**  
in months

**7.6**

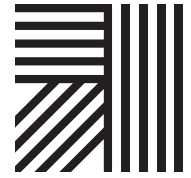


AVERAGE INVESTMENT PER MILL  
IN EFFICIENCY IMPROVEMENTS

**\$971,800**

AVERAGE ANNUAL SAVINGS PER MILL  
DUE TO EFFICIENCY IMPROVEMENTS

**\$212,680**



## GAP CASE STUDY:

# EXCEEDING ENERGY-EFFICIENCY GOALS WITH SUPPLIER PARTICIPATION

In 2017, Gap Inc. pledged to save 10 billion liters of water by 2020. Taking its 2014 usage as a baseline, the retailer became involved with the Clean by Design program as a way to meet this considerable goal. Because Clean by Design consists of 10 best practices, it is proven and yields measurable impact results and return on investment to the mills, while being easy to understand, adopt and execute. Gap Inc. recognized that Clean by Design would be low-hanging fruit for its suppliers to save water, so the company started proactively nominating its strategic facilities to participate.

Fast forward to Earth Day 2020 – Gap announced that it had exceeded its goal by saving 11.2 billion liters of water since 2014 – 10.2 billion with resource energy-efficiency programs and 1 billion through processing and product innovation. Without question, the Clean by Design program played a significant role in Gap's outstanding figures.

### How Gap Did It

Gap had been working with Clean by Design, which was first administered by the Natural Resources Defense Council (NRDC), since 2013 and had nominated facilities for each Clean by Design cohort. During the years of implementing Clean by Design, Gap intensified its involvement in sustainability, later serving as

**“Gap understands that efficiency programs are a win-win, good for the brand and good for our suppliers because saving energy and water results in cost-savings.”**

AGATA SMEETS,  
Director of Global  
Sustainability at Gap







one of the founding members of Aii. In the early years, a unified approach to sustainability programming was missing from the industry. Aii's management of the Clean by Design program changed that by promoting partnership, collaboration and transparency.

Between 2013 and 2021, Gap has nominated 52 facilities to participate in programs, including Clean by Design, Clean by Design Plus, Chemistry & Wastewater Management (in India) and Carbon Leadership. These facilities, which are responsible for Tier 1 (finished product assembly) and Tier 2 (material production) of the supply chain, have been located in Mainland China, Vietnam, India, Pakistan and Taiwan Region.

Thanks to these broad-reaching efforts, Gap has reported significant reduction in carbon, energy and water. Even better, the results provided the company with multiple synergistic benefits. While Gap had entered the Clean by Design program as a way to save water, the company soon realized that it was also saving energy, making it well positioned when setting science-based targets for Scope 3 GHG reduction.

"Gap understands that efficiency programs are a win-win, good for the brand and good for our suppliers because saving energy and water results in cost-savings," said Agata Smeets, Director of Global Sustainability at Gap.

### **Development for Aii**

Implementing the Clean by Design program didn't just benefit Gap's efficiency efforts and suppliers' bottom lines. The company's work has supported the industry's expansion of standardized impact programs globally.

In fact, Gap has taken a leadership role, along with Aii, in piloting the initiatives for program expansion to India, Vietnam and Taiwan Region. Gap also championed and drove the development of Aii's Clean by Design+ program, which supports wet processing facilities ready for more advanced-level programming.

"The Clean by Design partnership is flexible and focused on always improving and expanding," said Aaron Tam, Senior Manager of Gap's Environmental Capability Building team. "We understood that some facilities were ready for more and just needed support, so we were excited to be able to offer that. Likewise, we knew that meeting

our ambitions SBTs would take more than just going after that low-hanging fruit."

### **The Future**

Gap's priorities remain focused on water, climate and waste, and Aii's programs are vital for meeting the brand's climate goals. The company has been working along with Aii on strategies to meet its Scope 3 SBTs (30% of GHG emissions from 2017 baseline by 2030).

"We are driving all of our efficiency work through Aii and are super excited that Aii is now also expanding their programs to include additional impact initiatives to aggregate renewable energy procurement and coal phase-out projects – key levers in our climate strategy," said Smeets. "Our advice would be to just start. When we started, we were flying by the seat of our pants, and Clean by Design was a credible program that helped us structure our supply chain strategies."

Today, launching and joining collective impact programs in different geographies is a lot easier than it once was. When Gap first started doing this environmental work, the company had to develop and run its own programs because none were available in certain geographies.

"With Aii, we were able to fold these programs into one another," said Smeets. "We created an aligned approach, invited other brands to participate and introduced Aii to additional service providers like environmental consultants who could help put Aii's objectives into action on the ground."

Thanks to convenors like Aii, standardized metrics and aligned methodologies are more available and transparent, making results more predictable and replicable. Collective action is now recognized as the way to reach climate goals.

"It's important to not underestimate communication channels with your suppliers that you're nominating for these programs," said Tam. "A supplier's mindset is key to achieving success and results, and provides great programs through which to approach suppliers to urge them to undertake this work."

Gap's purpose is to be "inclusive by design." What consumers may not realize is, it's also to be "clean by design."

# CLEAN by DESIGN for TIER 1

## Energy Efficiency Stage 1 Tier 1 program (CbD S1T1)



CLEAN by DESIGN FOR TIER 1 (CbD S1T1) - Energy Efficiency Stage 1 Tier 1 program - Results in up to 15% energy savings; currently piloting in Vietnam.

[To Learn More Click Here](#)

### Description

Clean by Design for Tier 1 is a stage 1 (S1) program for Tier 1 (T1) facilities and captures low-hanging fruit efficiency improvements for facilities without wet processing.

### Overview / Context

Based on the success of Clean by Design to deliver efficiency for wet-processing facilities, Aii worked with strategic partner IDH, The Sustainable Trade Initiative to expand the program for T1 facilities without wet processing.

Launched as a pilot for 13 facilities in 2020, this program has demonstrated success in footwear production and cut & sew facilities.

**“The apparel industry has many sustainability issues that require collective action. By aligning with existing initiatives, we can accelerate implementation and avoid fragmentation and duplications. This will scale the impact on Sustainable Development Goals related to environment and social conditions in the apparel industry.”**

SIBBE KROL, IDH Senior Program Manager, Apparel

NUMBER OF FACILITIES  
AND BRANDS IN PILOT:

**13** facilities  
**4** brands

PILOT  
REGION:

Vietnam



# CLEAN by DESIGN for TIER 1

Energy Efficiency Stage 1 Tier 1 program  
(CbD S1T1)



## Results

In partnership with IDH's Race to the Top, program development was completed and launched with 4 brands and 13 facilities in Vietnam in 2020. The final results include an average 3.05% energy reduction for participating facilities.

## What's Next

In 2021, Aii will further scale the Clean by Design for Tier 1 program globally. We'll expand the methodology to all geographies where recurring cohort activities currently exist and partner closely with our licensed service providers to expand the pilot's success on a global scale.

### ENERGY SAVINGS TO DATE

8,844,700  
kWhv/year

### AVERAGE ENERGY REDUCTION

3.05  
%

### CO2 EMISSIONS REDUCTION

11,654 tons  
Co2/year

### AVERAGE CO2% REDUCTION

4.60  
%

### WATER SAVINGS TO DATE

219,94  
m<sup>3</sup>/year

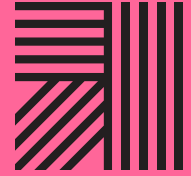
### AVERAGE WATER REDUCTION

10.0  
%



# CLEAN by DESIGN

## Chemistry & Wastewater Treatment (CbD Chemistry)



CLEAN by DESIGN - Chemistry & Wastewater Management Program - Includes an initial assessment of current performance and prioritized activities for optimizing chemical inputs and wastewater management; currently piloting in India and entering model phase in 2021.

[To Learn More Click Here](#)

### Description

Clean by Design Chemistry is a program for wet processing facilities designed to establish best practices and procedures for improving inputs, reducing chemical use, conducting careful oversight and operations of wastewater treatment, and recycling and reuse when possible.

### Overview / Context

In 2018, Aii collaborated with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to develop a next generation framework for reducing chemical and wastewater impacts in textile production. We worked with industry experts Dr. Linda Greer and Dr. Siva Pariti to research the feasibility of taking the best practice methodology, already successful for reducing energy and water use, and applying it to improving chemical and wastewater management for wet processing facilities.

With a new set of best practices in hand, Aii collaborated with Arvind Ltd., Gap Inc., PVH and Target Corporation, as well as our implementing partner Sustainable Textile Solutions(STS), to test their applicability in textile mills as a scalable program.

The CbD Chemistry pilot includes a diverse set of seven textile mills in India and has already demonstrated proof of concept in that each participating facility has identified and expects to achieve quantified chemical reductions and/or wastewater improvements as a result of the process. Concurrently, Aii has partnered closely with industry-leading experts and stakeholders like ZDHC to establish and maintain a roadmap for connecting the dots among other key chemistry and wastewater initiatives with an eye towards collaborating to drive results, not redundancy.

LAUNCHED  
PROGRAM WITH:

**7** facilities  
**3** brands

**REGION:**

India



# CLEAN by DESIGN

## Chemistry & Wastewater Treatment (CbD Chemistry)



Several leading apparel and footwear brands have demonstrated interest and commitment to bring the new “best practice” framework to their strategic suppliers. Aii is seeking program partners and funders to bring the Clean by Design program to scale and catalyze the industry towards rapid chemical and wastewater improvements.

### What’s Next

In 2021, Aii will work closely with our partners at STS to enroll additional brands and facilities into the Clean by Design Chemicals and Wastewater Management Program. We will also collaborate with Implementation Hub to bring integrated, stepwise program opportunities to the industry, leveraging ZDHC tools and resources.

**PILOT MILLS SAW THE FOLLOWING REDUCTION OPPORTUNITIES TO BE ACHIEVED BY 2021:** FROM THE **1200** CHEMICAL PRODUCTS EVALUATED, **193** WERE IDENTIFIED AS CHEMICALS OF CONCERN AND EXPECTED TO BE PHASED OUT.

All 7 mills saw opportunities of chemical reduction and expect to realize the following project achievements.

**AUXILIARY  
CHEMICAL  
REDUCTION**

**10-20**  
%

**DYES/  
PIGMENTS  
REDUCTION**

**1-10**  
%

**BULK  
CHEMICAL  
REDUCTION**

**7-30**  
%

With 2 mills operating with Zero Liquid Discharge system, 5 mills have seen opportunities of implementing projects that will: Reduce number of discharge exceedances.

**WATER  
USE**

**10-21**  
%

**POWER  
CONSUMPTION**

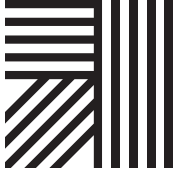
**12-22**  
%

**STEAM  
CONSUMPTION**

**14-22**  
%

For additional case studies on the Clean By Design program, [visit our website](#).

# CARBON LEADERS PROJECT



The Carbon Supplier Toolkit is a resource for supporting manufacturers in setting and achieving carbon targets. When used across a portfolio of suppliers, the toolkit promotes collective prioritization of supply chain decarbonization projects. [The Carbon Leadership Project](#) is a group of leading brands utilizing the Carbon Supplier Toolkit as the standard for achieving Scope 3 carbon emissions targets and identifying opportunities for collaborative action.

Leadership brands came together in 2020 for collective action to tackle carbon in the apparel supply chain where the biggest positive impacts can be made. Their first project was creating a supplier toolkit that helps manufacturers set a carbon target and identify hotspots based on their own manufacturer data.

## Overview/Context

The Carbon Supplier Toolkit was created in collaboration with RESET Carbon to meet the demands of brands and manufacturers seeking to align supply chain carbon emission programs with industry-level target setting initiatives like the Science Based Targets initiative. The toolkit provides an on-ramp for programs like Clean by Design, and it enables strategic coordination of improvement initiatives across a portfolio of manufacturing facilities.

In 2020, Aii and RESET Carbon brought together a group of action-oriented brands in the apparel industry to accelerate the implementation of their supply chain carbon targets, while also standardizing approaches with their suppliers so that they can be replicated by the rest of the industry. The supply chain participants collaborate on setting carbon targets, then share data and lessons learned in order to maximize carbon reduction throughout the industry.

We began to pilot the toolkit with eight brands to establish target setting and achievement tools for suppliers and develop transformative renewable energy and carbon reduction projects.

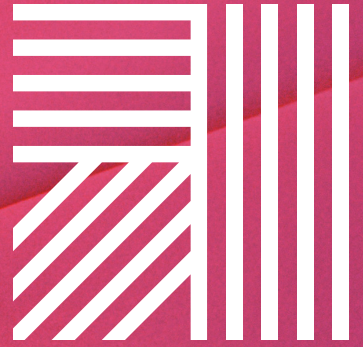
## Results

- Supplier Toolkit launched, which includes carbon tech assessment, trainings and carbon target setting.
- **8 BRANDS** joined the carbon leadership project and partnered with manufacturers on the supplier toolkit
- More than **50 MANUFACTURERS** committed to completing Carbon Tech Assessments in 2020

## What's Next

Aii will continue working with RESET Carbon to expand the utilization of the Supplier Toolkit with industry-leading brands and manufacturers, turning the Carbon Leadership Project into a scaled program. We will align the toolkit with industry platforms like the Higg Index to make the resources more accessible and replicable across impact areas, such as water use, chemicals management and wastewater treatment. The lessons learned from the original group of Carbon Leaders will inform new collective initiatives for the industry, such as coal phase-out programs, scalable machinery and process innovations, and off-site renewable energy projects.

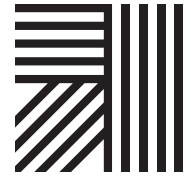




# FUTURE



# ROADMAP TO NET ZERO



The Roadmap to Net Zero is an input and guide for the system-wide collaboration needed to reduce GHG emissions by 45% by 2030 and to zero by 2050. With generous support from the Laudes Foundation, World Resources Institute partnered with Aii to develop the Roadmap. This was a natural collaboration given Aii’s mission to identify, fund, scale and measure solutions to accelerate positive impact in the apparel and footwear industry.

## Overview/Context

In June 2019, the World Resources Institute (WRI) published the Apparel and Footwear Sector Science-Based Targets Guidance. The objectives of the Guidance were to bring clarity and consistency to climate change target setting, which in turn would result in more companies setting science-based targets (SBTs). While the Guidance has helped build momentum around SBTs, there was a need to identify how companies, and the sector overall, could deliver on ambitious greenhouse gas (GHG) emissions reduction targets. Industry alignment is needed to focus its collective attention, resources and investment on the most impactful interventions.

MATERIALS	PRODUCTION
<p><b>LEVER 1</b></p> <p>Maximize material efficiency</p> <p>TIERS 1 2 3 4</p>	<p><b>LEVER 4</b></p> <p>Maximize energy efficiency across apparel manufacturing</p> <p>TIERS 1 2 3</p>
<p><b>LEVER 2</b></p> <p>Invest in and scale sustainable materials and processes</p> <p>TIERS 4</p>	<p><b>LEVER 5</b></p> <p>Eliminate coal in textile mills and manufacturing facilities</p> <p>TIERS 1 2</p>
<p><b>LEVER 3</b></p> <p>Accelerate the development of “next generation” preferred materials</p> <p>TIERS 4</p>	<p><b>LEVER 6</b></p> <p>Shift to 100% renewable electricity in manufacturing</p> <p>TIERS 1 2 3</p>
<p><b>LEVER 7</b></p> <p>Advance the circular economy</p>	<p>TIERS 1 2 3 4</p>

## Results

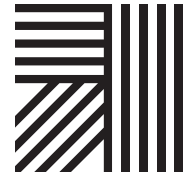
The draft report launched in September 2020 at the Sustainable Apparel Coalition Global Member Meeting, and a final report will be launched in 2021. Among its key findings, the report shares 7 interventions to decarbonize the apparel supply chain.

## What’s Next

The Roadmap is a guide to prioritize current and future efforts at Aii and in the apparel industry.

**Aii’s work IN 2020 focused primarily on Levers 4, 5 & 6, which refers to the type of intervention used to reduce carbon emissions.**

# RENEWABLES IN VIETNAM: ON-SITE ROOFTOP SOLAR GROUP PROCUREMENT PILOT (2021 program)



The Clean Energy Investment Accelerator (CEIA), the Apparel Impact Institute (Aii) and IDH, The Sustainable Trade Initiative intend to collaborate in an effort to introduce aggregated procurement approaches to enable greater use of clean energy in Vietnam's apparel industry supply chain.

The unique finance mechanism of an aggregated group RFP can unlock and give access to capital for apparel manufacturers. An aggregated group RFP means combining solar projects from several suppliers (regardless of province) into one larger (aggregated) project to create economies of scale resulting in a more competitive bidding process. More solar companies will be interested because of a higher volume of rooftop solar megawatts, unlocking more value for factories, which can more quickly ramp up the greener energy mix of the industry.

In Phase 1, two related work streams will be undertaken:

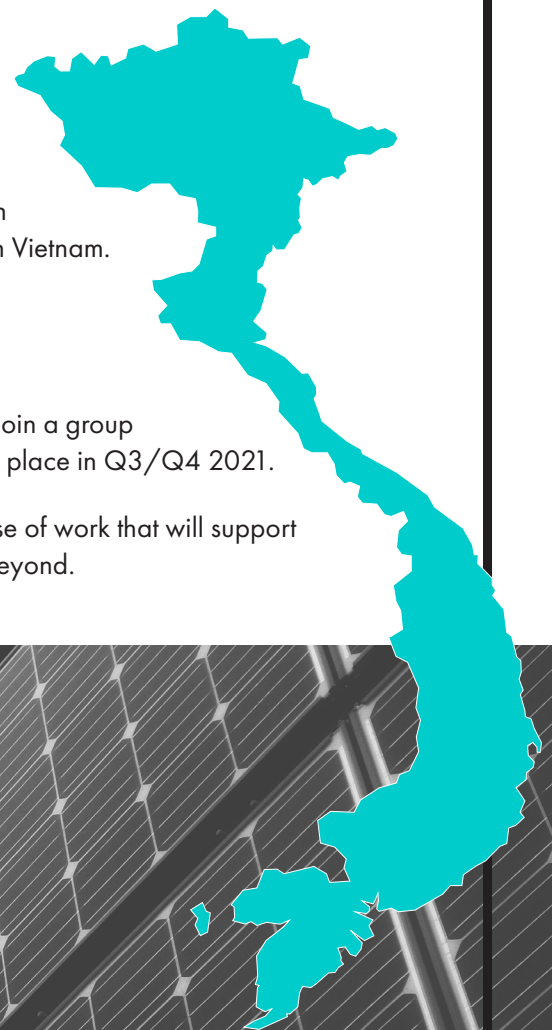
## 1. Corporate and Industrial Park Engagement and Strategic Planning

SUMMARY: Scope opportunities to partner with multinational brands, as well as industrial park operators and tenant companies (supply chain manufacturers) to scale innovative, clean energy procurement models in Vietnam.

## 2. Aggregated Supplier Rooftop Solar RFP Design and Recruitment

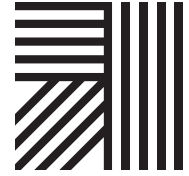
SUMMARY: Recruit 5-8 brands and 10-20 manufacturing suppliers to join a group procurement process for rooftop solar solutions in Vietnam that will take place in Q3/Q4 2021.

These work streams will prepare CEIA, Aii and IDH to launch a second phase of work that will support implementation of the aggregated rooftop solar process in late 2021 and beyond.





# CLEAN BY DESIGN GEOGRAPHICAL EXPANSION

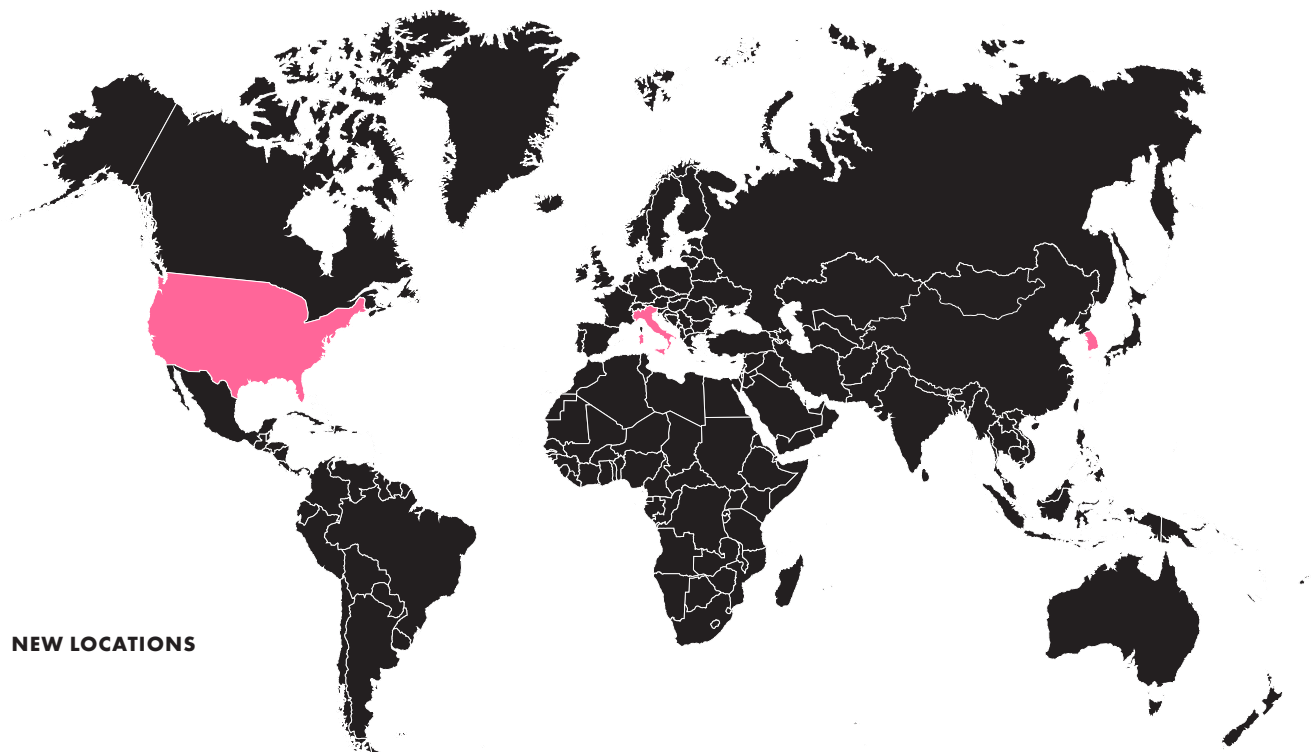


Aii is expanding globally with three new geographic locations launching Clean by Design in 2021, including California, Italy and South Korea.

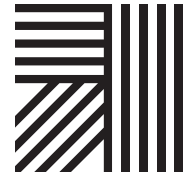
**Italy:** Aii was thrilled to announce in January 2021 a new program based in Italy that establishes a platform for Italian manufacturers to coordinate, fund and scale environmental programs with measurable impact. Even more exciting, two luxury fashion brands, Burberry and Stella McCartney, as well as the global luxury group Kering, have joined forces with Aii to lead the effort.

**California, USA:** Aii announced our first on-the-ground project in the United States, which launched during summer 2021, when we began feasibility research for implementing our Clean by Design program in apparel manufacturing facilities in California. To fund the study, we turned to the leading sustainable bank in the U.S., Bank of the West, and are grateful to the BNP Paribas subsidiary for a \$100,000 grant that enabled us to launch the California project.

**South Korea:** Aii collaborated with brand partners VF Corporation and Fjallraven to bring the Clean by Design approach to a strategic group of suppliers in South Korea. The pilot will establish a local partner for program deployment and determine further opportunities for expansion.



# UNLOCKING THE TRILLION-DOLLAR FASHION DECARBONISATION OPPORTUNITY



As a follow-up to the World Resources Institute & Aii joint report “Apparel & Footwear Sector Roadmap to Net Zero Emissions” and the BCG & Fashion for Good joint report “Financing the Transformation in Fashion,” Aii and Fashion for Good are collaborating on a new report that will investigate the landscape of carbon-reduction solutions, the role for financial capital, and the total financial funding/investment required to achieve the implementation recommendations from the previous reports. We believe this work will provide a roadmap for apparel and finance industry decision makers, with the ultimate goal of creating a larger role for financial capital and innovation in reducing the carbon footprint of the apparel supply chain.

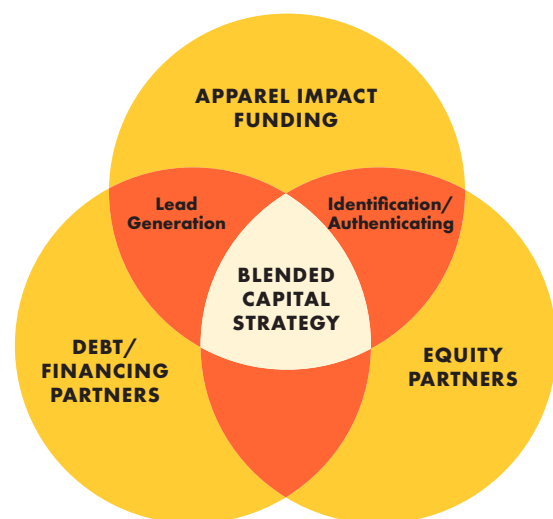
## Part 1. Landscape of Solutions

Aii and Fashion for Good will provide an overview of the latest solutions for achieving science-based targets, including existing solutions such as:

- Renewable energy across the supply chain
- Energy-efficiency improvements
- Materials-efficiency improvements
- Scaling preferred materials
- Replacing coal-fired boilers

As well as innovative solutions:

- Next-generation materials
- Moving from wet to dry processing



SETTING THE STAGE TO DEPLOY BLENDED CAPITAL

## Part 2. The Role of Finance

Aii and Fashion for Good teams will map the landscape of currently available financial tools/instruments that manufacturers/brands can access (e.g. supplier trade finance, green bonds, and equity investment), as well as identify promising new financial tools/structures. Additional value will come from industry perspectives on the challenge and accelerants to broader adoption of these tools. Examples of apparel brands that have utilized these financial tools will also be included (e.g. Walmart and Puma).

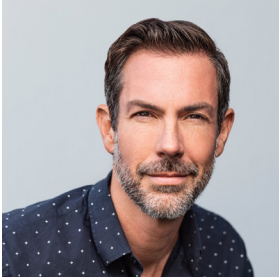
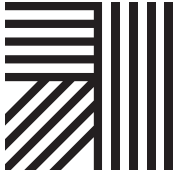
## Part 3. “Size of the Prize” Analysis on Key Reduction Opportunities

Aii and Fashion for Good teams, along with research partners, will quantify the estimated financial investment required to implement the landscape of solutions discussed in Part 1. Additional granularity will be provided on the investment size of specific interventions, as well as on a regional basis where relevant.

This project is a partnership between Aii, Fashion for Good, and HSBC.

The report is scheduled to be published in Q4 2021.

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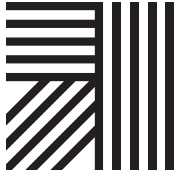
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