## Contents

### ANNUAL IMPACT REPORT 2021

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter from Lewis Perkins</td>
<td>2</td>
</tr>
<tr>
<td>Vision and Mission</td>
<td>3</td>
</tr>
<tr>
<td>Our History</td>
<td>4</td>
</tr>
<tr>
<td>How We Work</td>
<td>5</td>
</tr>
<tr>
<td>Reports: Road Map to Net Zero &amp; Unlocking the Trillion-Dollar Fashion Decarbonisation Opportunity</td>
<td>6</td>
</tr>
<tr>
<td>Focus Areas</td>
<td>7</td>
</tr>
<tr>
<td>Introduction to Impact by Kurt Kipka</td>
<td>8</td>
</tr>
<tr>
<td>2021 Program Highlights</td>
<td>9</td>
</tr>
</tbody>
</table>

### ROADMAP TO 2030

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fashion Climate Fund</td>
<td>20</td>
</tr>
<tr>
<td>Climate Solutions Portfolio</td>
<td>21</td>
</tr>
<tr>
<td>Aligned Investment Capital</td>
<td>23</td>
</tr>
<tr>
<td>Planned Program Expansion Areas</td>
<td>24</td>
</tr>
<tr>
<td>Geographic Expansion Areas</td>
<td>27</td>
</tr>
<tr>
<td>New Partners in 2022</td>
<td>28</td>
</tr>
<tr>
<td>Aii Leadership Team</td>
<td>29</td>
</tr>
<tr>
<td>Aii Board of Directors &amp; Strategic Advisors</td>
<td>30</td>
</tr>
</tbody>
</table>

### PROGRAMS AND PROJECTS

<table>
<thead>
<tr>
<th>Program/Project</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean by Design Energy &amp; Water Efficiency</td>
<td>12</td>
</tr>
<tr>
<td>Aggregated Renewables</td>
<td>14</td>
</tr>
<tr>
<td>Clean by Design Chemistry &amp; Wastewater Treatment</td>
<td>15</td>
</tr>
<tr>
<td>Carbon Leadership Program</td>
<td>17</td>
</tr>
<tr>
<td>2021 Stakeholders</td>
<td>18</td>
</tr>
<tr>
<td>2021 Partners</td>
<td>18</td>
</tr>
<tr>
<td>2021 Implementation Partners</td>
<td>18</td>
</tr>
</tbody>
</table>
DEAR FRIENDS,

If you have recently seen the Apparel Impact Institute (Aii) in the media or have spoken with members of our team (and we hope you have!) you have heard the word ‘bold.’ That is because we all know it is time for the entire textile, apparel and footwear community to make actionable commitments to reach our goal of reducing GHG by 45% over the next eight years.

When the pandemic became widespread in early 2020, our industry had a moment to pause and pull back as we all tried to understand how the real impacts of COVID-19 would affect global supply chains and thereby our mission. 2021 was a year where the Institute and our industry partners reaped numerous benefits from the previous year’s opportunity to focus on the strategy for expanding programs and regions to best meet our 2030 science-based targets. We released two critical reports that informed our work and the subsequent acceleration of resources — *The Roadmap to Net Zero* with World Resources Institute and *Unlocking the Trillion-Dollar Opportunity Fashion Decarbonisation Opportunity* with Fashion for Good and HSBC.

These two reports pointed us clearly to where carbon resides within the apparel supply chain and clarified the type of capital it would take to finance its removal. As a result, Aii recently announced the call for a $250 million Fashion Climate Fund, an industry-wide collaborative designed to unlock $2 billion in blended-capital to identity, fund, scale and measure proven solutions to achieve science-based targets.

The urgency to accelerate climate action in our industry is happening, and we see increased engagement across all stakeholders. While this is encouraging, the heavy lifting is still ahead and we must go big now. At Aii, we are stepping up. And we seek ‘bold’ leaders to join us.

Below you will learn more about our progress during 2021 towards this work. It was a strong start towards our goals, and along with the addition of greater resources coming from Lead Partners to the Fashion Climate Fund, we require the participation of everyone: from industry to philanthropy to investors, innovators and solutions providers.

Thank you to everyone for your efforts to get us where we are today. I’m inspired by what’s on the horizon. Let’s get bold together.

*Lewis Perkins*
President, Apparel Impact Institute

```
Lewis B. Perkins
```
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

2007

**Clean by Design**

was created to focus on energy and water efficiency in mills through 10 Best Practices.

2009

**The Sustainable Apparel Coalition**

was founded to collaboratively transform the apparel industry through standardized measurement.

2017

**The Apparel Impact Institute**

was founded by the Sustainable Apparel Coalition (SAC); IDH, The Sustainable Trade Initiative; Natural Resource Defense Council (NRDC) and Target Corporation.

2019

**Integration**

Aii integrated with Clean by Design to scale our Mill/Impact Program and deliver high-level thought leadership and impact in the industry.

2020 & Beyond

**Expansion**

Aii adds new quality, scalable, and profitable impact solutions, using science and data to drive measurable results.
HOW WE WORK

We identify, fund, and scale science-based, measurable programs within the apparel and footwear industry.

IDENTIFY
Identify & Validate opportunities that align with current industry roadmap interventions and industry demand.

FUND
Catalyze industry and philanthropic funding and organize deployment around pre-seed innovation, program testing and derisking, and accelerating validated impact programs.

SCALE
Accelerate implementation of impact programs and projects that meet our criteria for quality programming: science-based, measurable results, profitable, globally scalable.
Two reports released last year can align the fashion and apparel industry around ambitious climate goals.

Together these reports shape Aii’s strategy to be the industry’s clearinghouse of quality programs proven to reduce carbon emissions.

**ROADMAP TO NET ZERO**

Outlines the levers we need to act upon to achieve a minimum of 45% carbon emission reduction by 2030.

**UNLOCKING THE TRILLION-DOLLAR FASHION DECARBONISATION OPPORTUNITY**

Outlines the funding models needed to support these levers and goals.
Focus Areas

Aii’s 2021 programming focused on two interventions. Additional focus areas will be added in 2022. All interventions are critical to decarbonizing the supply chain.

**Tier 4**
Raw Material Extraction
24% of GHG Emissions

1. Maximize Material Efficiency

**Tier 3**
Raw Material Processing
15% of GHG Emissions

2. Scale Preferred Materials & Practices

3. Accelerate “Next Gen” Materials

4. Maximize Energy Efficiency

**Tier 2**
Material Production
52% of GHG Emissions

5. Eliminate Coal in Material & Product Manufacturing

6. Shift to 100% Renewable Electricity

**Tier 1**
Finished Product Assembly
9% of GHG Emissions

7. Implement Circular Business Models

- Current focus
- Upcoming focus
- Future opportunity
INTRODUCTION TO IMPACT BY KURT KIPKA

In 2021 we saw the depth and breadth of Aii programs expand unlike any year in the organization’s history. Our program pipeline for bringing programmatic concepts to commercial readiness was on full display with massive steps forward like:

- Our Carbon Leadership Program, with collaborating partner RESET Carbon, transitioned to a permanent program based on the success of the pilot for supporting manufacturers setting and achieving carbon targets

- Our Aggregated Renewables Pilot, with collaborating partners CEIA and IDH, became fully funded and reached recruitment goals, bringing the concept of grouping renewable electricity demand among manufacturers for improved procurement terms to a pilot for expansion and replication

- Our implementation programs, grounded in Clean by Design, expanded to new regions including Italy, South Korea and the United States, further expanding the scale of our carbon, water and hazardous chemical reduction efforts

As I look to 2022, I look forward to even more transformative efforts in our programs to lead the industry on its roadmap to 2030. I’m particularly excited about our projects for expanding renewable electricity and clean thermal energy use in apparel and footwear production facilities. I’m also keen to see the proliferation of standardized target-setting across the sector, based in science, for accelerating the collective action-planning required for curbing its environmental impact. Momentum is building, yet there’s an incredible amount of work to do. Let’s get to it!

Kurt Kipka
Chief Impact Officer, Apparel Impact Institute
2021 Program Highlights

Total number of brands with active programming in 2021: 27
Total number of facilities that started a program in 2021: 295

TOTAL REGIONS WITH PROGRAMMING:
India, Italy, Mainland China, Pakistan, South Korea, Taiwan region, Vietnam, USA

Aii Deployed 7 programs with 3 global program managers and 6 solutions providers:
1: Efficiency: Tier 1
2: Efficiency: Tier 2
3: Efficiency: “Plus”
4: Chemistry Program
5: Renewable Energy Aggregated Procurement project
6: Coal Phase Out project
7: Carbon Leadership Project

ACTUAL + FORECASTED IMPACT

GHG REDUCTIONS: 316,451 tonnes/year or 10%
WATER / SAVINGS: 2,903,575 cubic meters/year or 10%
CAPITAL INVESTED: $28M
Average $519k invested per facility
FINANCIAL SAVINGS: $38M
Average $700,000 savings per facility
MONTHLY PAYBACK: Monthly Payback: 9 months

FORECASTED IMPACT FOR FACILITIES THAT COMPLETED PROGRAMS IN 2021:
482,706 tonnes/year or 10%
3,458,350 cubic meters/year or 10%
$58M
Average $859k invested per facility
$54M
Average $800,000 savings per facility
MONTHLY PAYBACK: Monthly Payback: 13 months
2021 Allocation of Funding

**Allocation of Total Funding**
- Impact Programs: 68%
- Ecosystem Tools & Leadership: 6%
- General and Administrative: 26%

**Allocation of Impact Program Funding**
- Clean by Design Energy & Water Efficiency: 45%
- Carbon Leadership Program: 24%
- New Program Incubation: 19%
- Renewable Energy: 7%
- Clean by Design Chemicals & Wastewater Management: 5%
Clean by Design Energy & Water Efficiency is Aii’s inaugural program that captures low-hanging fruit efficiency improvements in production facilities. 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 manufacturing units can adopt for optimal efficiency, and they pave the way for more sophisticated projects when the facility is ready.

Our approach is to work through a network of local subject matter experts, as our experience shows that a strong understanding of the local laws and regulations, as well as customs and ways of working, is essential to drive change in facilities. To that end, we work with 6 local service providers who are subject matter experts in textile processing and resources management.

Clean by Design 10 Best Practices:

> Metering & Data Management
> Condensate Recovery
> Cooling Water Reuse
> Process Water Reuse
> Heat Recovery from Wastewater
> Improve Boiler Efficiency
> Steam System Optimization
> Improve Isolation
> Heat Recovery from Hot Exhaust Air
> Optimizing Compressed Air System
Aii is running three different types of Clean by Design Energy & Water Efficiency Programs:

Clean by Design Energy & Water Tier 2:
Highly successful legacy mill improvement program that leverages 10 Best Practices to reduce environmental impacts of wet processing facilities.

Clean by Design Energy Tier 1:
Leverages the legacy Clean by Design Tier 2 program to reduce environmental impacts of Tier 1 facilities.

Clean by Design Plus Energy & Water Tier 2:
Builds on the legacy Clean by Design program offering participants deeper analytical insights, target-setting methodologies and advanced level environmental improvement opportunities. CbD+ is available to facilities that have participated in traditional CbD or similar international programs, or which have demonstrated advanced environmental performance.

IMPACT:
In 2021, 10 brands recruited 50 facilities into our CbD Energy & Water Efficiency Program, spread over China, Taiwan, South Korea, Vietnam, Italy, India, Pakistan, and the United States.

- Range of energy reduction: 3% - 12%
- Range of GHG emissions reduction: 3% - 11%
- Range of water reduction: 3% - 19%
- Range of payback period: 6 - 19 months
- Total forecasted tonnes of carbon reduction for facilities that started programs in 2021: 483,000 tonnes of CO₂ reduction per year
- Carbon removed by facilities that have completed programs (since 2018): 479,000 tonnes of CO₂ per year
- Capital invested in carbon reduction improvements by facilities that have completed program (since 2018) since inception: $73 million
AGGREGATED RENEWABLES

On-Site Rooftop Solar Group Procurement Pilot in Vietnam

The Clean Energy Investment Accelerator (CEIA), the Apparel Impact Institute (Aii) and IDH collaborated 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 2021, CEIA-Aii-IDH recruited 9 apparel manufacturers from 6 global brands, and has received proposals with discounts ranging from 10-44%, which would be a clear advantage for each manufacturers’ operating expenses.

In addition to cost savings, the transition to clean energy also builds a competitive advantage for the manufacturers. Both consumers and the global brands who are large purchasers of Vietnam’s apparel manufacturers’ products have rapidly become aware of and concerned with their carbon footprints. Many Vietnamese manufacturers may want to transition to lower, or even net zero, carbon footprints for internal corporate responsibility reasons. Even Vietnamese manufacturers who would not make this transition on their own are considering or actively pursuing transitioning to clean energy solutions to ensure their continued partnership with their climate-conscious global brand consumers.

RESULTS:

- 9 apparel manufacturers
- 6 global brands
- Electricity price discounts ranging from 10-44%
Clean by Design Chemistry and Wastewater 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 enabling recovery and reuse of chemicals whenever possible. The cornerstone of the Clean by Design Chemistry and Wastewater Program is a set of 10 Best Practices for Wet Processing that are practical, low cost and easy to implement.

In 2021 we completed our pilot project in India, which experienced some delays due to COVID-19. During the initial pilot, facilities realized operational savings up to 43% on a recipe level, which is a strong indicator that we can surface opportunities to decrease water and energy use in facilities from recipe optimization.

10 Best Practices for Wet Processing:

1. Chemical Inventory Management
2. Improve Chemical Selection
3. Match Recipes with Usage
4. Optimize Equipment Size and Capacity
5. Receive and Reuse Chemical Inputs
6. Enhance Communication Between Key Personnel
7. Manage Key Process Waste Streams
8. Manage Wastewater Influent Temperature
9. Monitor Wastewater Influent & Effluent
10. Ensure Effluent Treatment Plant Emergency Preparedness
In preparation for the expansion phase, Aii worked closely with the ZDHC Implementation Hub team and has put the program on ZDHC endorsement track by integrating ZDHC Guidelines, Platforms and Solutions, e.g. the ZDHC MRSL and Wastewater & Sludge Guidelines, the ZDHC Gateway and the Supplier Platform, ZDHC InCheck for inventory conformance, and ZDHC ClearStream for wastewater testing.

PILOT RESULTS:

- Average of 12 opportunities per facility
- 92% of the identified opportunities were implemented
- Identification and substitution of several hazardous chemicals, such as PFAs
- Up to 29% reduction of commodity chemicals
- Up to 43% operational time and 64% chemical savings from recipe optimization

“The CbD Chemistry and Wastewater Program achieves efficiency improvement and creates positive impact for all facilities that use chemicals and generate wastewater. This program emphasizes the role of chemical selection, use and relation towards the Effluent Treatment Plant load and operations. It is exciting to work on a program that creates real impact and drives cleaner and greener chemistry in the industry by being very practical.”

DR. SIVA PARITI, Senior Technical Marketing Officer at Bluwin Limited
In 2021, Aii and our collaborating partner RESET Carbon continued the growth and expansion of the Carbon Leadership Program (CLP). The CLP program brings together 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.

The program utilizes the Carbon Supplier Toolkit to provide support for manufacturers to identify carbon savings potential, prioritize carbon savings projects and track their progress towards carbon reduction goals. The tools and supporting resources provide brands and manufacturers with a standardized approach for supply chain target setting and progress monitoring.

**IMPACT:**

- Range of reduction potential by 2030 identified:
  - Average water reduction potential by 2030 per site: **35%**
  - Average energy reduction potential by 2030 per site: **21%**
  - Average carbon reduction potential by 2030 per site: **35%**

- **20** brands participating

- 2021 cohort identified actions to remove up to **1,020,000 tonnes** of CO$_2$ emissions per year

**Aii’s Manufacturer Carbon Toolkit:**

- Complete set of tools to support education, technical guidance, tracking, planning, benchmarking and reporting of carbon performance.

- Designed to be applied consistently to processes and site characteristics of dye mills, laundries and vertical manufacturers, which are responsible for a major concentration of carbon emissions in footwear and apparel brand and retailer supply chains.

- Transparent methodology leveraging existing tools and programs, in particular Aii CbD and Higg FEM.

- Presented in a language and simple format accessible for suppliers.

---

**Carbon Baseline Tool**

Standardized carbon baseline reporting

**Carbon Target Calculator**

Connect action plan and estimate pragmatic facility level carbon target

**Low Carbon Action Plan Tool**

Planning and estimating the carbon impacts of carbon reduction projects

**Carbon Reporting Tool**

Standardize reporting of key KPIs
2021 Stakeholders

COLLABORATORS:
Accelerate Circularity
Fashion Conveners
Fashion for Good
Fashion Pact
Global Fashion Agenda
Higg
Mill Improvement Alliance
Natural Resources Defense Council (NRDC)
Race to the Top
Sustainable Apparel Coalition (SAC)
Textile Exchange
United Nations Fashion Industry Charter for Climate Action
World Resources Institute (WRI)
ZDHC

2021 INDUSTRY & FUNDING PARTNERS:
Abercrombie & Fitch
American Eagle
Arc’teryx
Artistic Milliners
Arvind Mills
Bank Of The West
Burberry
C&A
Chaiken Foundation
Columbia
Decathlon
European Outdoor Group
Fast Retailing
Fila
Fjällräven
Gap
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
HSBC
Icebug
IDH
JCPenney
Kering
Laudes Foundation
Levi Strauss
Lululemon
Nemo
New Balance
Nike
Primark
Puma
PVH
Ralph Lauren
REI
Roy A. Hunt Foundation
Schmidt Family Foundation
Stella McCartney
Stichting Doen
Target
Tchibo
The Reformation
Under Armour
Vera Bradley
VF Corp
Victoria’s Secret

2021 IMPLEMENTATION PARTNERS:
Act Renewable
Albini Energia
Allotrope Partners
Cascade Energy
cKinetics
Clean Energy Investment Accelerator (CEIA)
Crest China
Elevate
Enerteam
Espire Consult
Green Energy Associates
Hongyu
ICF Consulting
IDH
IEM
Legambiente
National Renewable Energy Laboratory (NREL)
NimkarTek
Pozzi Leopoldo Srl
RESET Carbon
Sustainable Textile Solutions (BluWin Limited)
The Bhive
Vietnam Cleaner Production Center
Yujin Energy Technology
ZDHC Implementation HUB
Roadmap to 2030
Fashion Climate Fund

Apparel Impact Institute, a 501(c)3 foundation, has created a Fashion Climate Fund of $250M in philanthropic and industry treasury funds to support climate action in the fashion industry. The fund is designed to unlock another $1.75B of debt & equity investment to decarbonize the apparel supply chain.

Specifically, the Fashion Climate Fund will aggregate corporate contributions and philanthropic funding to apply toward identifying and rapidly scaling proven CO₂ emissions interventions inside a shared global supply chain. Such a pooled fund will align philanthropic and government grantmakers, alongside industry funding and blended capital, across a shared and agreed upon suite of solutions in order to reach the ambitions timeline set by the science-based targets.

We see the greatest need to apply philanthropic and industry funds to early and mid-stage projects where catalytic funding can derisk unproven solutions in order to unlock financial capital to reach scale. The $250M will be spent over 8 years, unlocking another $1.75B+ in investable ROI projects.

A BLENDED CAPITAL SOLUTION WILL HELP DECARBONIZE FASHION

The fund is built to catalyze capital across philanthropy, industry, and debt & equity, and has the power to achieve a reduction of 150M tonnes of carbon over the next 28 years.
Climate Solutions Portfolio

Leveraging the findings in two recent reports, 1. The World Resources Institute (WRI) and Aii joint report— the Roadmap to Net Zero: Delivering Science-Based Targets in the Apparel Sector and 2. the Unlocking the Trillion-Dollar Fashion Decarbonization Opportunity report, authored with Fashion for Good and HSBC, the Climate Solutions Portfolio is a registry to identify, fund and scale impact programs leading to scope 3 emissions reduction in the apparel sector. Such a registry will create greater transparency by aligning the industry’s disparate programs and providing data assurance based on clearly defined impact criteria, thereby derisking early stage solutions and creating greater demand and unlocking increased capital for adoption of those ready to scale in the supply chain.

Critically, many of the major apparel brands have pledged to submit programs to the registry, adding much needed transparency and coordination to the industry. The Fashion Climate Fund will provide impact reporting on all registered programs and will also be aligned with philanthropic and financial capital to ensure that programs are properly funded and mature to scale.

DISCOVERY
Find established programs that have shown promise or efficacy in reducing Scope 3 carbon emissions.

EVALUATION
Review current program data, impacts, and highlights to determine appropriate fit.

REPORTING
Provide data and reporting capabilities to understand program progress and attract funding to the program and prioritize action.
The Climate Solutions Portfolio will evolve to include new functionality and industry support over time.

**ORGANIZE**
Bring carbon reduction programs together in one place for users to discover, evaluate, and report with Aii’s support.

**FORECAST**
A more sophisticated set of features that would allow users to project the impact of programs and report impact more seamlessly.

**EXPAND**
Continue to expand users, program submissions, and scale beyond fashion where climate programming gaps exist.
Aligned Investment Capital

The apparel and footwear industry is ready for ESG investment with high financial and environmental returns. In fact, 61% of the capital needed to meet these reduction targets is for solutions that already exist, they simply require adequate investment. The remaining interventions within the supply chain, including eliminating the use of coal in material and product manufacturing and the reliance on petroleum-derived polyester, require new solutions that are commercially viable and deployable across geographic regions, areas which are ripe for venture capital investment.

Our recent report, in partnership with Fashion for Good and sponsored by HSBC, estimates that $1 trillion will be needed for apparel and footwear to reach net zero by 2050. This includes $300B in grant funding from philanthropy and corporate brand treasury for riskier pre-seed and seed technologies, blended with $700B of debt and equity investment to scale existing solutions now and fund the next wave of innovations.

Alongside the Fashion Climate Fund, Aii is seeking to unlock and drive another $1.75B in debt & equity investment by 2030 through strategic partnerships with aligned investment capital providers, including venture capital, private equity, and banks, to fund capital improvements and technological developments in order to decarbonize the apparel and footwear supply chain. This is a bolder, more urgent, and holistic approach to Aii’s existing program, Clean by Design. Since 2018, the program has aggregated and deployed over $6M in philanthropic funding into energy efficiency programs, which has unlocked $73M (12x) in financial capital. See case study: Investing in environmental improvements at wet processors generates positive financial returns.

$2B BLENDED CAPITAL UNLOCK OVER 8 YEARS
Planned Program
Expansion Areas

RENEWABLE ENERGY PROGRAM
Aii and partners IDH and CEIA are piloting an aggregate renewables procurement process aimed at increasing access to renewable electricity for production facilities in Vietnam. The next phase of the program will secure discounted renewable procurement costs for the participants. With proof of concept and learnings from the pilot, Aii aims to extend the model to new service providers, brands, facilities and regions.

For some production facilities a transition to renewable on-site energy production is not reasonably attainable. Aii will build from the Carbon Leadership Program to mobilize these facilities with limited on-site renewable energy options and explore off-site opportunities to bring to pilot.

RENEWABLE THERMAL ENERGY/COAL PHASE OUT
Drawing from pre-seed feasibility studies and landscape assessments, Aii will identify key regions, production types and processes where innovation is needed in order to effectively shift to renewable thermal energy. By isolating specific needs in this way, we will activate and accelerate development and innovation where it is needed most on the industry’s path to net zero. To address facility needs in the future boiler efficiency assessments, capacity building in boiler operations and sustainable biomass procurement will also become important levers towards coal phase out.

MATERIALS EFFICIENCY
Leveraging the successful footwear pilot led by Footwear Distributors and Retailers of America (FDRA), and in partnership with Elevate, Aii launched a pilot program to advance zero manufacturing waste goals in Vietnam. As of August 2022, eight manufacturers participated in the Aii’s waste management program which combines data collection, onsite visits, training and impact assessment over a 14 month period. The program will ultimately help brands and buyers develop a reliable baseline of waste generated in their supply chain, build factories’ awareness and capability to manage and reduce waste, and quantify greenhouse gas emissions associated with their manufacturing waste.
PLANNED PROGRAM EXPANSION AREAS

NEW FACILITY TYPES

- **Sector Expansion:** In collaboration with the Apparel Impact Roundtable and Expert Advisory Committee, Aii will identify key sectors for expanding efficiency programming. Activities will include opportunity-based facility mapping exercises, adaptation of existing resources and alignment with strategic sector-specific partners.

- **Industrial Parks:** Industrial parks provide a unique role in enabling the textile industry’s decarbonization efforts. Providing water, energy, centralized wastewater treatment, waste handling, etc., they are a natural point of aggregation for impact projects in production facilities. Aii seeks to engage industrial park managers in key regions for bringing forward aggregated models for capacity building and renewable energy transitions.

- **Tier 3.5:** In collaboration with Textile Exchange, Aii will pilot efficiency programming at “Tier 3.5” production facilities. Defined as raw materials processing (e.g. ginning cotton, scouring wool, rPet and man-made cellulosics processing), Tier 3.5 represents a significant impact opportunity which to date has been relatively untouched. Aii and Textile Exchange will coordinate a cohort of production facilities through the process of setting a performance baseline, establishing an action plan of improvement and measuring the results of implemented projects. In doing so, we will establish proof of concept for efficiency programs at Tier 3.5 locations and identify commercial partners for bringing the process to scale.

CHEMISTRY AND WASTEWATER MANAGEMENT PROGRAM EXPANSION

Taking the The Clean by Design Chemistry & Wastewater Management Program to the model stage, we will expand to Bangladesh and China in 2022 and look at a more holistic approach towards data measurement to identify how recipe optimisation can contribute to carbon reduction.

The Roadmap to Zero Programme, by ZDHC, leads the fashion industry to eliminate harmful chemicals from its global supply chain by building the foundation for more sustainable manufacturing to protect workers, consumers and our planet’s ecosystems. Building on first successes from the pilot program, Aii is aiming for full ZDHC endorsement in 2022.
PLANNED PROGRAM EXPANSION AREAS

CARBON LEADERSHIP PROGRAM EXPANSION
Developed together by Aii and RESET Carbon, the Carbon Leadership Program is one of the most hands-on carbon management programs for manufacturing facilities. Progress happens when brands and retailers can make decisions from a comprehensive view of their impact. That’s why we’re excited to integrate the Carbon Leadership Program assessment with Higg, which will bring together key data streams from across the industry in one place.

The water module is a natural expansion of the Carbon Leadership Program as the Textile Industry is dependent on water in all steps of manufacturing. In many cases we see a correlation between energy reduction, water savings and carbon reduction. The water module prioritizes a holistic approach towards action planning to achieve net zero emissions.

Based on the early success of the Carbon Leadership Program and supplier toolkit, Aii and implementation partner RESET Carbon have completed a Coal Phase Out Technology Feasibility Study for facilities in Vietnam. The focus on identifying coal burning boiler use in production facilities as part of the supplier roadmapping process, participating brands and facilities can now set interim coal phase out goals and timelines to achieve them on their path to net zero emissions targets, as coal phase-out is a long journey.
Aii is expanding globally with three new geographic locations launching Clean by Design in 2022, including Bangladesh and Indonesia.

- **BANGLADESH**: Aii plans to accelerate its work by bringing Clean by Design and a Renewables Development Program to Bangladesh. The approach to facility recruitment in Bangladesh shall build on a partnership with industry associations and funding from the philanthropic sector.

- **INDONESIA**: Puma reached out to Aii to suggest bringing the Clean by Design Energy and Water Efficiency Program to Indonesia. The kick-off for the program is planned for September 2022 with a first set of facilities.

- **MAURITIUS**: In 2022, Mauritius has been brought to us from two angles. ASOS reached out to us, and the local industry association contacted us simultaneously, being highly interested in driving carbon reduction in Mauritius. As a first step, the Carbon Leadership Program has been brought to the facilities, which will be essential for us to understand the specific opportunities on this beautiful island.
New Partners in 2022

NEW STRATEGIC COLLABORATORS

The Industry We Want (TIWW)
Solidaridad
World Wildlife Fund (WWF)
Pakistan Environment Trust

NEW INDUSTRY & FUNDING PARTNERS

Amazon
ASICS
ASOS
Farfetch
H&M Group
H&M Foundation
J. Crew
W.L. Gore
Aii Leadership Team

Lewis Perkins
PRESIDENT

Kurt Kipka
CHIEF IMPACT OFFICER

Ryan Gaines
CHIEF FINANCIAL OFFICER

Kay Bloomberg
CHIEF OF STAFF

Tamara Wulf
SENIOR DIRECTOR OF PROGRAMS

An Zhou
SENIOR TECHNICAL DIRECTOR

Stephanie Warrick
INDUSTRY ENGAGEMENT DIRECTOR

Juan Chen
SENIOR TECHNICAL ENGINEER

Bruno Carneiro
PROGRAM MANAGER

Congnan Zhang
PROGRAM MANAGER
Aii Board of Directors & Strategic Advisors

BOARD OF DIRECTORS

Punit Lalbhai  
Arvind Mills  
BOARD CHAIR

Melissa Fifield  
Bank of the West  
BOARD MEMBER

Liam Salter  
RESET Carbon  
STRATEGIC ADVISOR

Pawan Mehra  
cKinetics  
STRATEGIC ADVISOR

Amina Razvi  
Sustainable Apparel Coalition  
BOARD MEMBER

Ted Van Der Put  
IDH, Sustainable Trade Initiative  
BOARD MEMBER

Dr. Linda Greer  
Independent Consultant/Industry Expert  
STRATEGIC ADVISOR

Dr. Siva Pariti  
Sustainable Textile Solutions  
STRATEGIC ADVISOR

Devon Rothwell  
Condé Nast  
BOARD MEMBER

Amanda Tucker  
Target Corporation  
BOARD MEMBER

Cynthia Cummis  
World Resources Institute  
STRATEGIC ADVISOR

Susanna Wilson  
HSBC  
STRATEGIC ADVISOR

Apparel Impact Institute: Annual Impact Report 2021