

# Promoting Best Practices in Sustainable Manufacturing

#### Context

A significant barrier to clean, safe, fair and climate-smart manufacturing in Asia is the lack of on-site experts with the technical and management skills to address Environment, Health, Safety (EHS) and energy priorities. In Bangladesh, over 11,000 workers suffer fatal accidents and over 24,000 die from work-related diseases each year. In China, the manufacturing sector generates emissions that are higher than the total emissions of any other country besides itself and the United States. And in India, the energy intensity of manufacturing is among the highest in the world.

ISC is tackling these challenges through its EHS\* Network, an association of industrial training centers (EHS\* Centers) across Asia that equip manufacturing professionals with the skills they need to plan and implement sustainable manufacturing practices – saving lives, conserving resources, and reducing greenhouse gas emissions.

ISC's network of EHS<sup>+</sup> Centers has been cited by *Bloomberg, Fast*Company, China Business Review and PBS News Hour as an innovative global supply chain sustainability solution.

## The Network's Impact

Described early on as "a groundbreaking pilot that has demonstrated significant impacts and led to improvements in key EHS performance metrics," the EHS<sup>+</sup> Network now offers 80 courses including energy management, and has achieved more than 40,000 training instances – improving the performance over 2,000 factories in Bangladesh, China and India.

# **Areas of Impact**

- Energy Efficiency
- Environmental Health
- Worker Health and Safety
- Industrial Supply Chain Management
- Greenhouse Gas Reduction

# **Impact Highlights**

## Uptake

- 94% of workers adopted new energy and carbon management practices.
- The total number of audited "findings of fault" decreased by 58%

#### Safety

- 65% of workers reported that their workplace is safer.
- Average worker injury rates among all surveyed facilities decreased by 44%.

#### Resource Efficiency

- Water efficiency improved by 17%
- Average wastewater discharge per unit of production value decreased by 14%
- 25% of facilities reported significant improvement in solid waste management and recycling practices
- 28% of facilities achieved recycling rates of over 90%, and some even achieved zero solid waste.
- 86% of managers reported line workers' efficiency improved.





# Funding & Resource Partners

- adidas
- Apple
- GE Foundation
- ISC Climate Innovation Fund
- MacArthur Foundation
- · Mahindra & Mahindra
- Pfizer
- Embassy of Sweden
- USAID
- US Department of Energy
- Walmart
- The Walt Disney Company
- World Resources Institute



#### **About ISC**

Since 1991, the Institute for Sustainable Communities (ISC) has led more than 115 transformative community-driven sustainability projects in 30 countries including the United States, China, India, and Bangladesh. ISC helps unleash the existing power of local people and institutions to address immediate social, economic, and environmental challenges and opportunities – all while building those on-the-ground solutions into national and international best practices and policy. At the heart of the organization's approach is results-focused, authentic, and pragmatic engagement with all stakeholders, which unearths locally-driven and equitable solutions to the biggest challenge we face – global climate change.

Learn more at **sustain.org** 

## For More Information Contact

#### **Brent Habig**

VP, International Programs bhabig@iscchina.org +86-10-84519421



#### ISC's Role

In partnership with global brands, industry associations and other stakeholders, ISC works with subject matter experts and local training providers in Bangladesh, China and India to develop and refine courses that meet the needs of brands, and reflect the local manufacturing context in each country and elsewhere in the region. Complementing training in classrooms and on factory floors, ISC conducts demonstration projects that illustrate realworld ROI of EHS+ improvements, enhances access to technology, provides wrap-around technical assistance to select factories, facilitates linkages with financial institutions so that capacity-building initiatives drive adoption of best practices and result in real change. Finally

By providing training at all levels of a factory – ranging from workers "on the floor" to supervisors to managers and owners, ISC's

## Featured EHS\* Network Courses:

- Air Pollution Management
- Behavior Based Safety
- EHS Leadership
- Electrical Safety
- Environmental Regulatory Compliance
- Financial Aspects of Energy Management
- Fire Safety
- GHG Emissions Reporting
- Green Building
- Hazardous Chemicals
  Management
- Industrial Water and Waste Water Management
- Job Safety Analysis
- Machine Safety
- Women and Occupational Health and Safety

EHS<sup>+</sup> Centers are moving factories from basic EHS compliance to more proactive and holistic practices resulting in real and lasting change.

" [The EHS\* Center] won't be as sexy as the electric car, but it might do more to save the planet for our grandchildren."

- President Bill Clinton

