# Sustainable Manufacturing

### **Hunter**®

HUNTER INDUSTRIES
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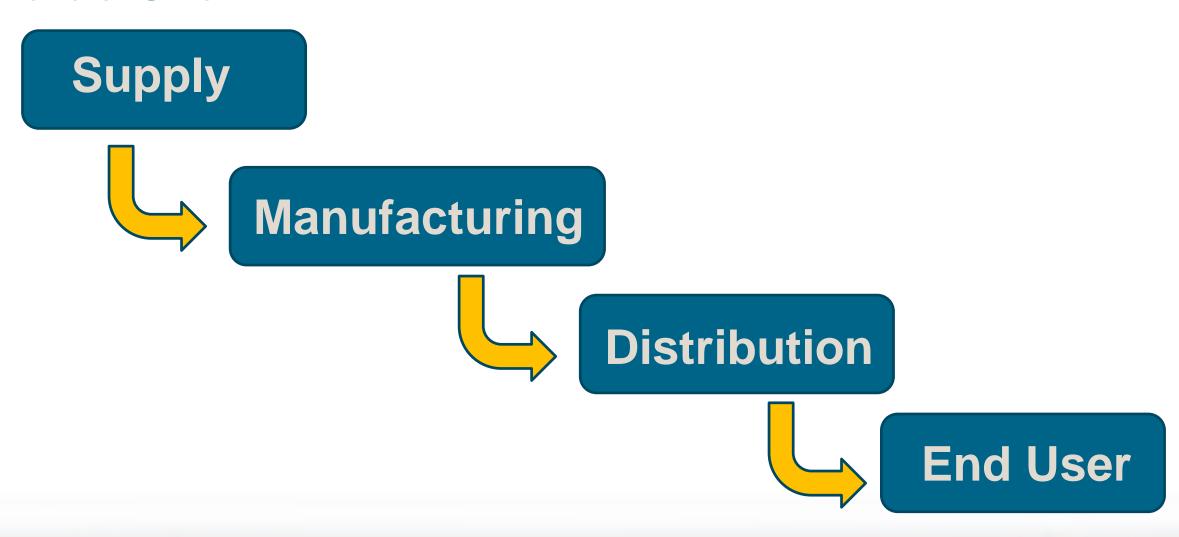
December 2019







#### **Value Chain**





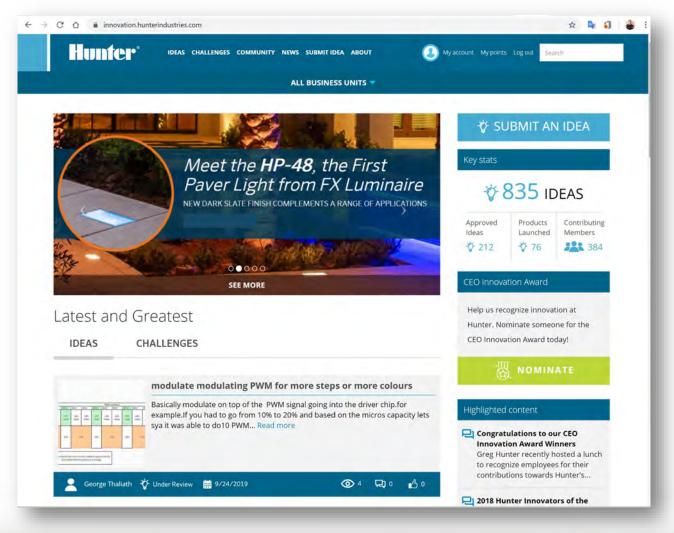
## **Manufacturing Overview**





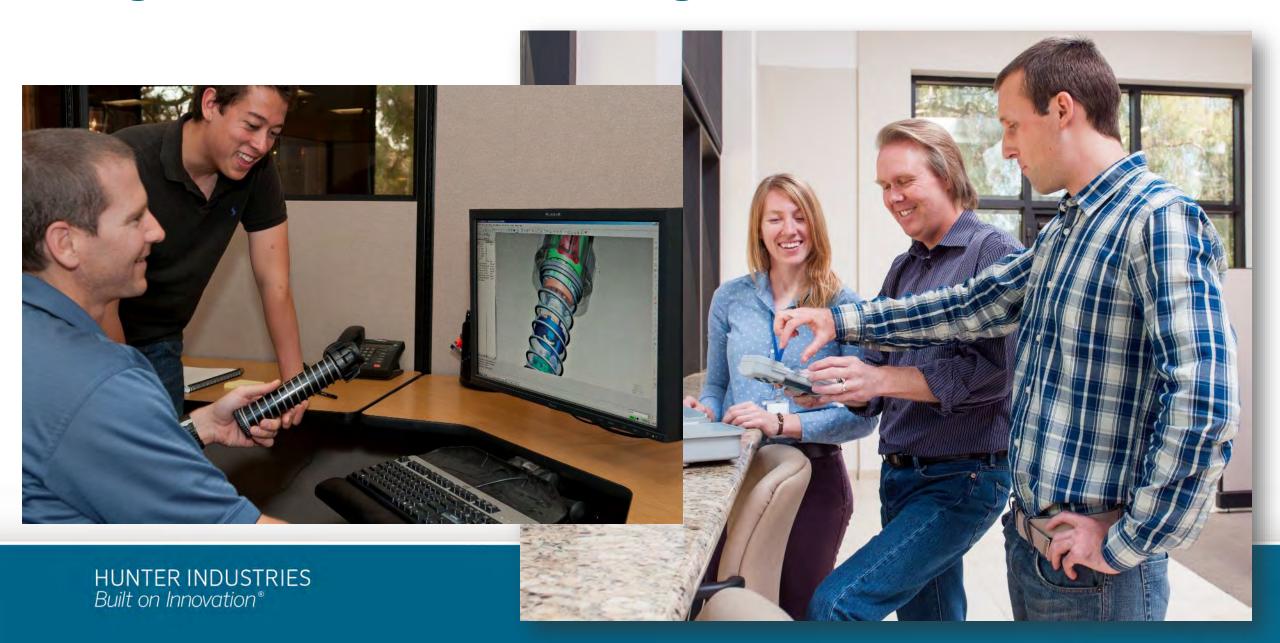
## **Design and Innovation**



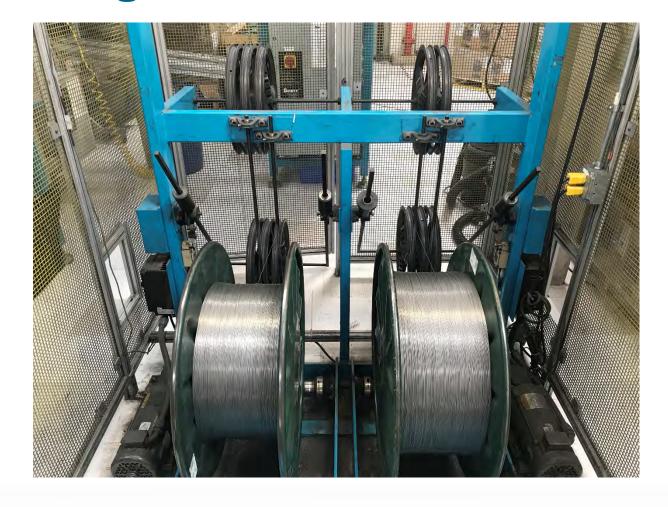




## **Design and Innovation: Design Process**



## **Design and Innovation: Materials**







## Design and Innovation: Low Impact Design

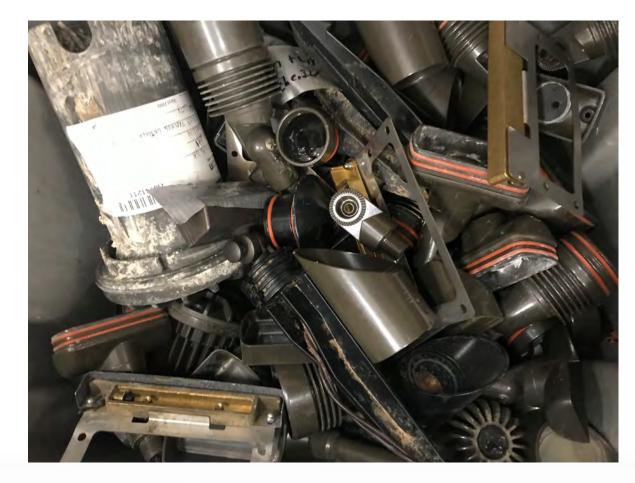








## Design and Innovation: End of Life







## **Tooling and Manufacturing**







## **Tooling and Manufacturing: Efficacy**







**Tooling and Manufacturing: Efficacy** 





## **Tooling and Manufacturing: Efficacy**







## **Tooling and Manufacturing: Waste**









#### Resources





## **Resources: Consumption**







## **Resources: Measure and Manage**









## **Resources: Measure and Manage**





## Resources: Employees / Social Governance







## **Quality Control**





## **Transportation**



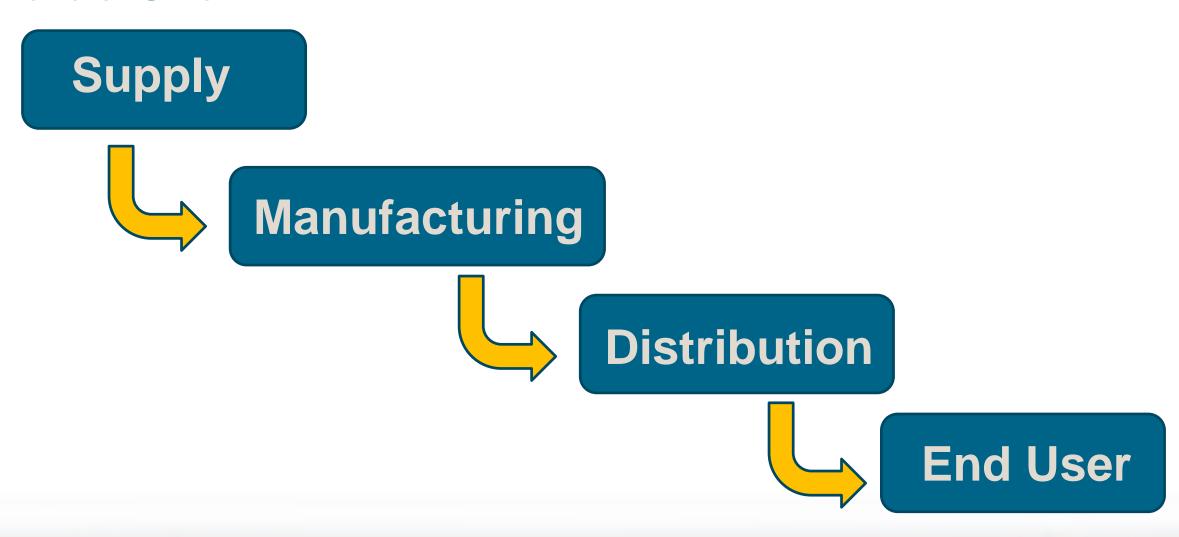
We proudly offer UPS carbon neutral shipments



ups.com/ carbonneutral

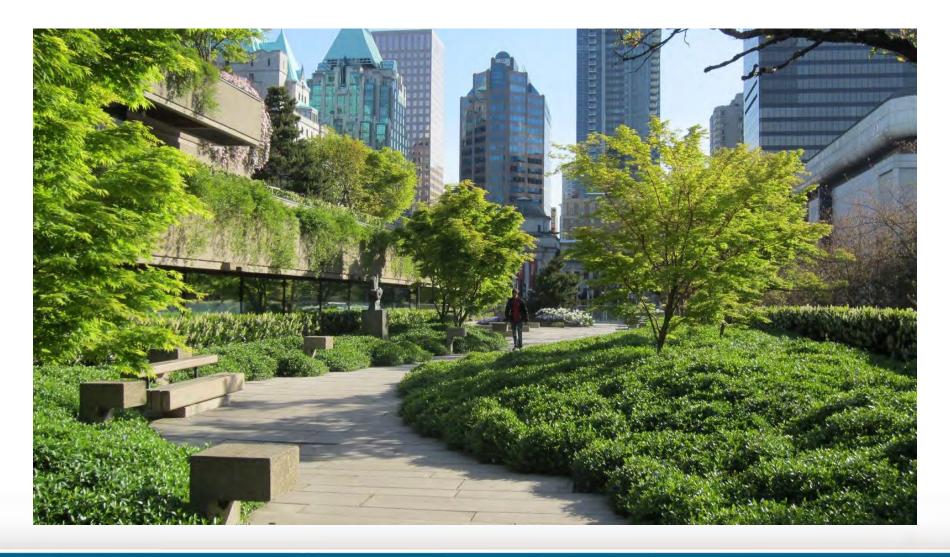


#### **Value Chain**





#### **Green Infrastructure**





## **Green Infrastructure: Community**







## Green Infrastructure: Heath and Well-being







#### **Green Infrastructure: Environment**







## **Green Infrastructure: Economy**







#### **Green Infrastructure: Performance**

05.02.17

#### These Cities Are Replacing The Worst Kind Of Infrastructure With The Best

R.I.P. parking lots.



3/7 [Image: courtesy SWA]

**Case Study Briefs Fast Fact Library Benefits Toolkit** Collections

More Y

The Landscape Performance Series is the online set of resources to help designers, agencies, and advocates evaluate performance, show value and make the case for sustainable landscape solutions.



Carbon & Climate >

**Urban Agriculture** >

Active Living >

Resilience >

Biodiversity >

**Frontier Project** 



Sarah E. Goode STEM.

**Dutch Kills Green** 

Revitalization >

Social Equity >

Water Management >



## **Green Infrastructure: Irrigation**





## **Green Infrastructure: Balance Inputs and Outputs**





## **Resource Efficiency**





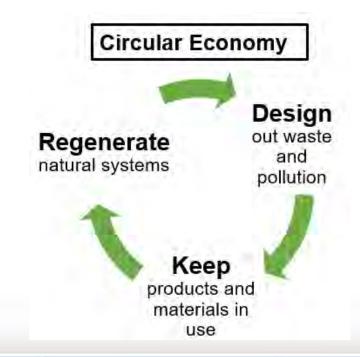
#### **Waste**



#### Linear Economy

**Take** resources from the ground

Make into products which are used Waste
discarded when no
longer needed or
wanted



## **Partnerships**









# Focus on dis Abilities



## Inspiration & Investment







#### Solve Two Problems...



Wasted Talent: Of the 50 million people in the U.S. with a disability, less than 20% are participating in the labor force



Wasted Resources: Of the 20-50 million tons of e-waste produced globally each year, less than 13% is recycled

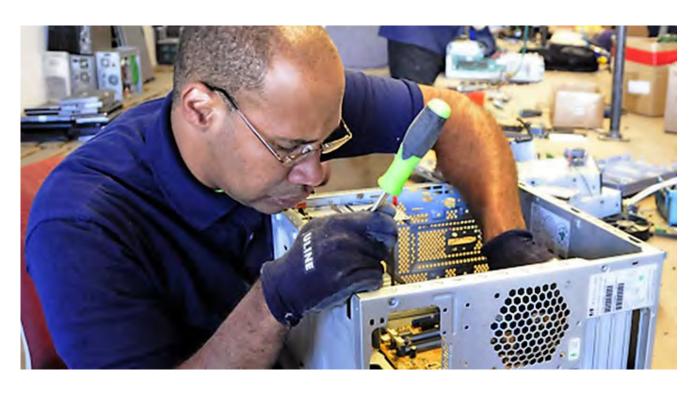


\*Bureau of Labor Statistics, 2014

\*\* US News & World Report,
2014



### With one solution...





Ethically recycle electronics to create local jobs for people with autism and other dis Abilities.



### A New Approach



Financially self-sustainable nonprofit No dependence on outside funding



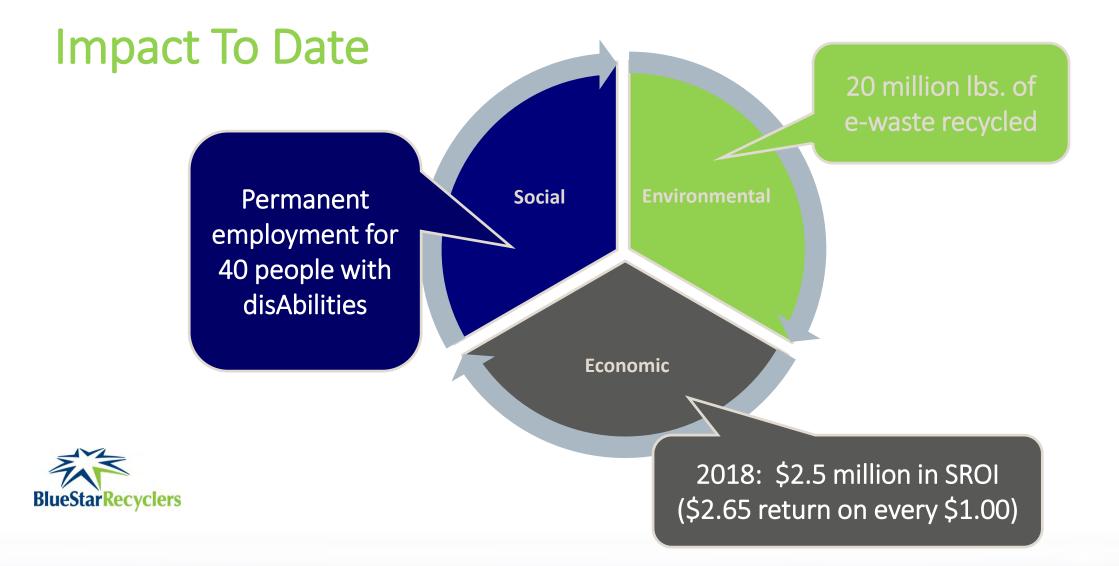
Asset vs. deficit-based employment model Reduces taxpayer burden



Transforms waste into community benefit *Produces triple-bottom line impact* 







\*As of July 1 2017



# Workforce Advantage



- Less than 20% annual employee turnover
- Zero absenteeism
- Zero lost-time accidents
- 98% on-the-clock task engagement



"If I did not have my work, I would not have my life."

Temple Grandin



### **Workforce Development Partnership**

Cherry Creek Schools - Aurora, CO

Vocational Training/Bridge to Employment Program established 2014

All school district e-waste is sent to program and ultimately recycled by BSR

Students acquire and demonstrate skills for permanent employment with Blue Star

Win-Win-Win:

✓ BSR gets a qualified and trained employee

✓ Student has opportunity for first real job

✓ School District and taxpayer costs reduced



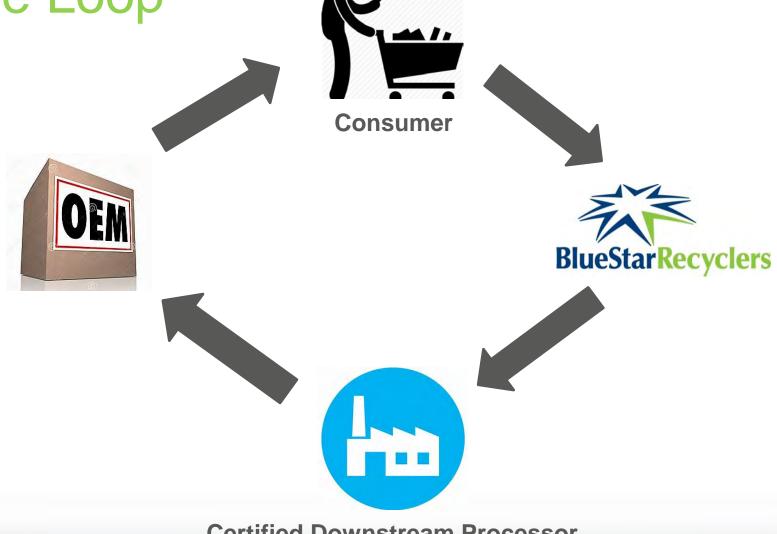
Kian Phair Age 18 – 2014 Transitions Program Student



Kian Phair Age 22 – 2018 Recycling Tech/ BSR



# Closing The Loop



**Certified Downstream Processor** 



## Enterprise & Certifications

- Certified electronics recycling
- Data Destruction
- Computer Refurbishing
- Fluorescent Bulb Recycling
- Recycling events management

























### Locations:

#### **Current Recycling Operations:**



#### 2019 Expansion:









# Thank you!

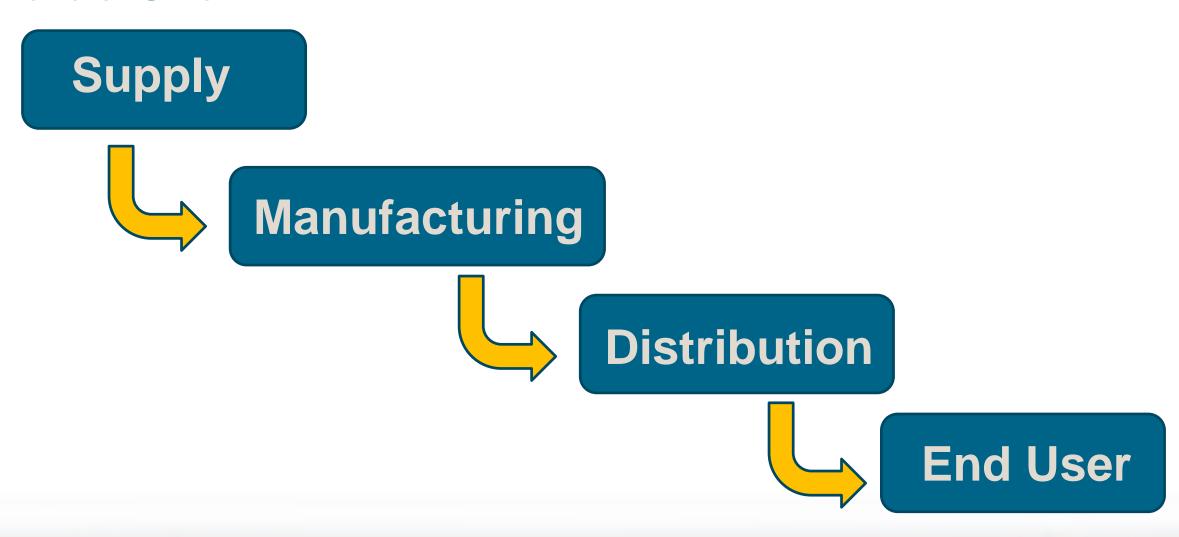




www.bluestarrecyclers.org



### **Value Chain**





# Creating partnerships to find solutions







# **Sharing the story**





# Creating a Resilient and Sustainable Industry





# Sustainable Manufacturing

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