



Building Sustainability and your bottom line through lean

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Electri-Cable Assemblies

Our Vision:

To bring passionate people together to work hard, have fun, and inspire each other.

Our Values:

- Create and Embrace Change
- Strive to be the Best
- Be Honest, Open, and Respectful
- Inspire Others
- Be Passionate
- Accept Accountability and be Accountable
- Learn- Everyday
- Have Fun



Key takeaways

You don't have to be bad to be good.

Clearer understanding of the Lean – Sustainability fit

A practical approach to becoming more sustainable

Becoming an environmentally sustainable organization can be surprisingly good for your bottom line IF done the lean way.



Our results – Bottom line

- 5 years straight with 20%+ YOY organic growth
- Superior profitability and growth in profitability
- Lead time averaging 12 days
- Produced & Shipped 3,600 product variations in 32 families in the last 12 months
- Inventory turns at 7.2 and growing 7% each year



From a sustainability perspective

- 60 % reduction in energy used per unit produced
- Quarterly Gain sharing program
- Deep, growing commitment to our community
 - \$90k for St. Jude through annual golf tournament
 - 8 charity events completed in 2016
 - 9 employee engagement events
- High level of employee engagement and satisfaction



Who I am, am not

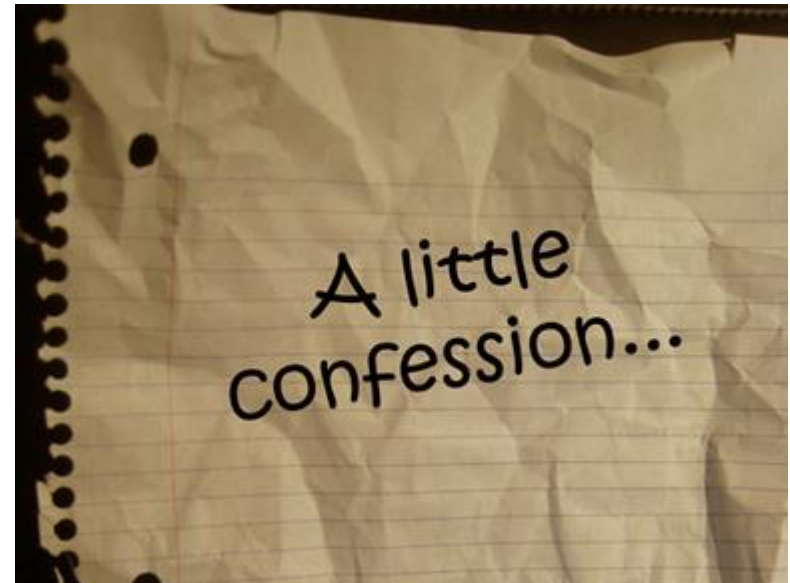
Not a bleeding heart

More worried about global terrorism than global warming

- I'll recycle if it is convenient
- I don't compost
- I drive a gas car
- I use AC in the summer

But....

Prove it and I will commit





A false start

Started with the idea of doing Sustainable things

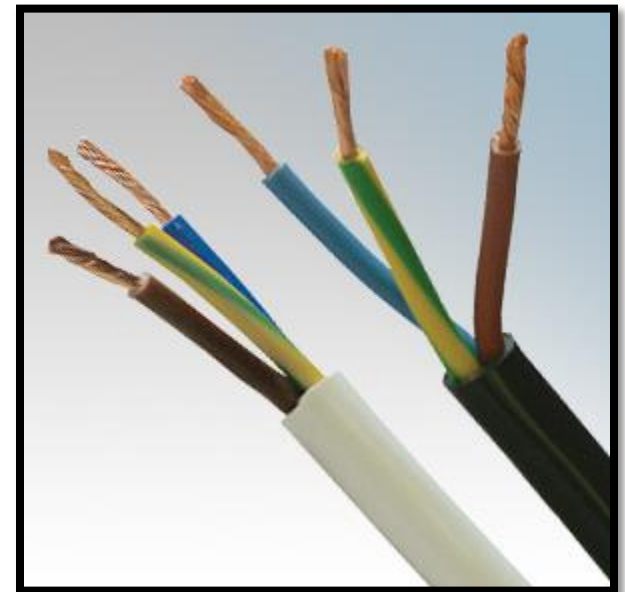
The program

- Sustainability message

- Recycled content

- Scrap metal recycling

PVC free wire



Problem: Sustainability seen as a program



Paradigm shift

- 80's Quality or productivity not both
- Today Profitability or the Environment
- Consumption v's Preservation

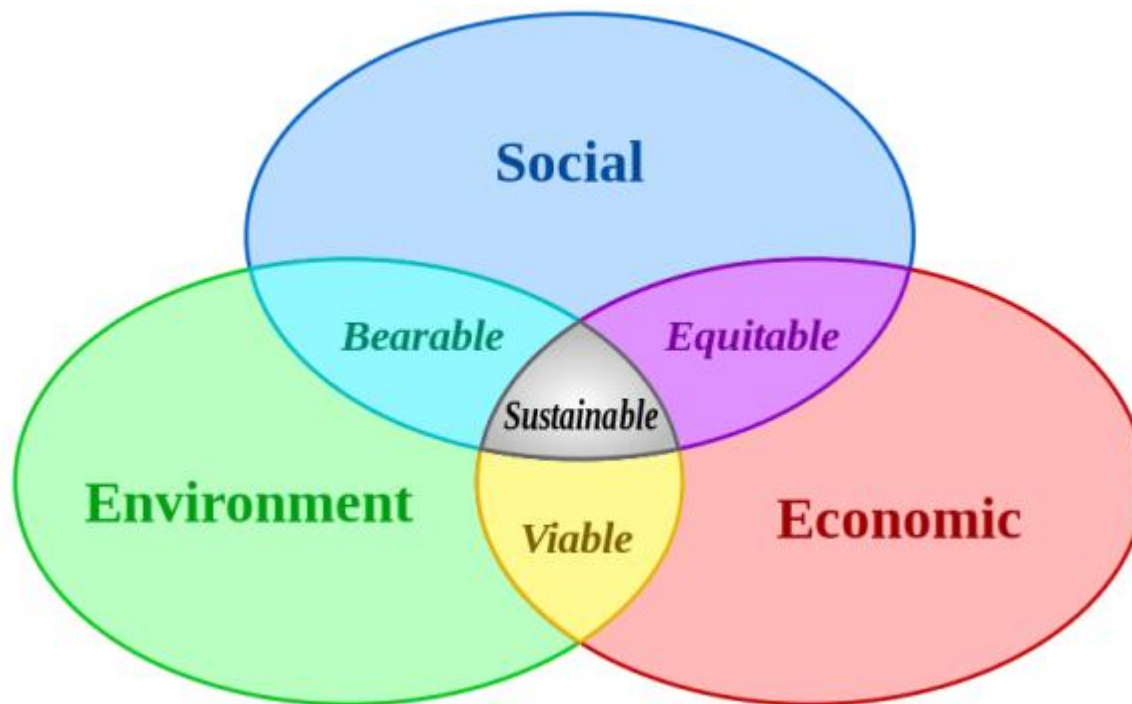


- Solution: Change the equation



What is sustainability?

Sustainability is improving the quality of human life while living within the carrying capacity of the Earth's supporting eco-systems.





What is sustainability

It must make financial sense

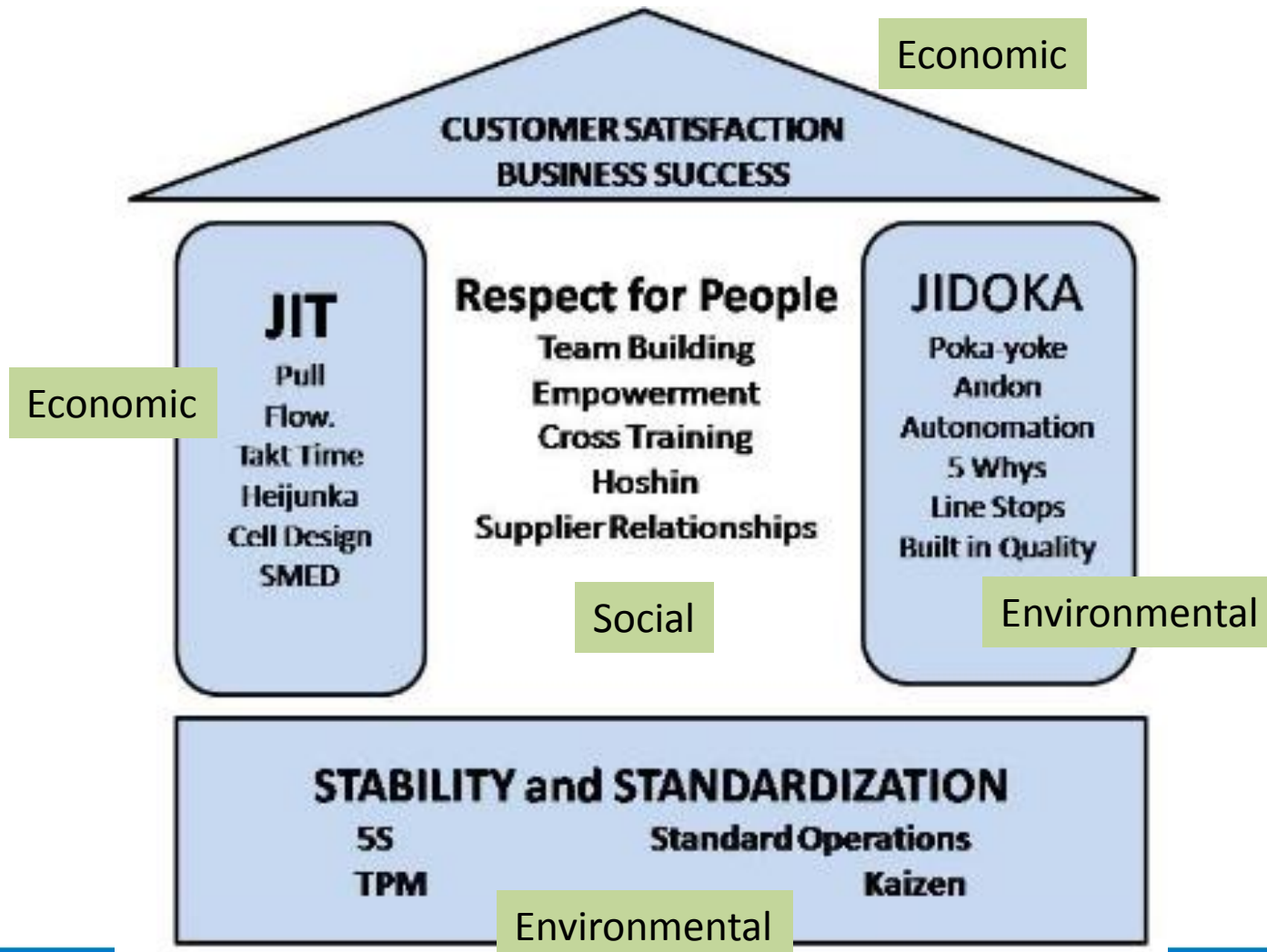
Drivers

- Government regulation
- Government incentives
- Societal norms
- Profit





What is lean?





Lean and Sustainability

Lean thinking and Environmental sustainability can be in harmony, provided there is

- Trust
- Clear mission, vision, values and purpose
- True employee engagement
- Clear processes for change – SABA
- Persistence and Determination

Keep it within the Lean Production System



Three Fundamental Questions

1. How capable is our organization of surfacing problems and opportunities and resolving them thoroughly and quickly at all levels?
2. How engaged are our associates?
3. Are we developing tomorrow's leaders, today?





Our Lean Focus

- It's about PEOPLE and PROCESS
- STOP TALKING LEAN or **SUSTAINABILITY!**
- You don't need a title to Lead.
- Dig where you stand!



Sustainable change

SABA

By installing Structures that precipitate specific Activities to occur. These activities foster certain Behaviors which over time motivate the formation of desired Attitudes.



Sustainable change - example

SABA

Hamden, CT recycling Up 30% in 2014. How?





Dig where you stand

No expertise required to start

- Start basic
- Become informed
 - Read up
 - Join a peer group





Dig where you stand

Join a group:

Business Sustainability Challenge (BSC)

1. Improve competitiveness
2. Reduce energy consumption
3. Manage resources responsibly
4. Encourage renewable energy production





Standard work practices - Daily rhythm

- Daily Tier meetings
- Leader standard work
- Created a constancy of purpose and relentless engagement



CCA
Daily Tier Meeting Form
Date: 12/28/16

Set up tier 1 board
First person stop
Go to back out of spec
Measure, correct
Share correct qty of pull
Fold in blue print, blue print

YEAR-END'S KEY PERFORMANCE INDICATORS (2 Minutes)

MEASURE	UNIT	ACTION ITEM
YTD Sales	5.0M	5.1M
YTD Profit	1.5M	1.6M
YTD Quality	98%	99%
YTD Safety	0	0
YTD Delivery	100%	100%

TODAY'S OBSTACLES & PLAN FOR SUCCESS (2 Minutes)

Need to boost unit output
Need to get more 11 comments

REVIEW OF ACCOUNTABILITY PROCESS

Accountability Process	Accountability Process
1. Set up tier 1 board	1. Set up tier 1 board
2. First person stop	2. First person stop
3. Go to back out of spec	3. Go to back out of spec
4. Measure, correct	4. Measure, correct
5. Share correct qty of pull	5. Share correct qty of pull
6. Fold in blue print, blue print	6. Fold in blue print, blue print

NEW OPPORTUNITIES, OBSTACLES AND OBSERVATIONS (2 Minutes)

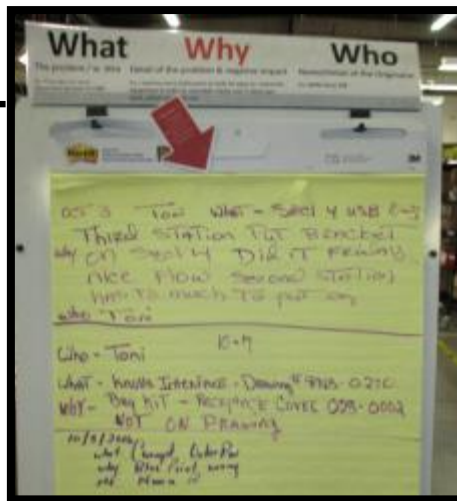
Environmental	
Social	
Economic	



Focused employee engagement

Easy to use structures uncovering and managing opportunities
Trained lean thinkers

Yields...



Environmental	
Social	
Economic	



Paint teams daily accountability board



Environmental	
Social	
Economic	



Structural

Reduce energy costs - Variable speed compressor
Facility Energy management

Result: Air power when needed
Smarter Energy management - Free



Environmental	
Social	
Economic	

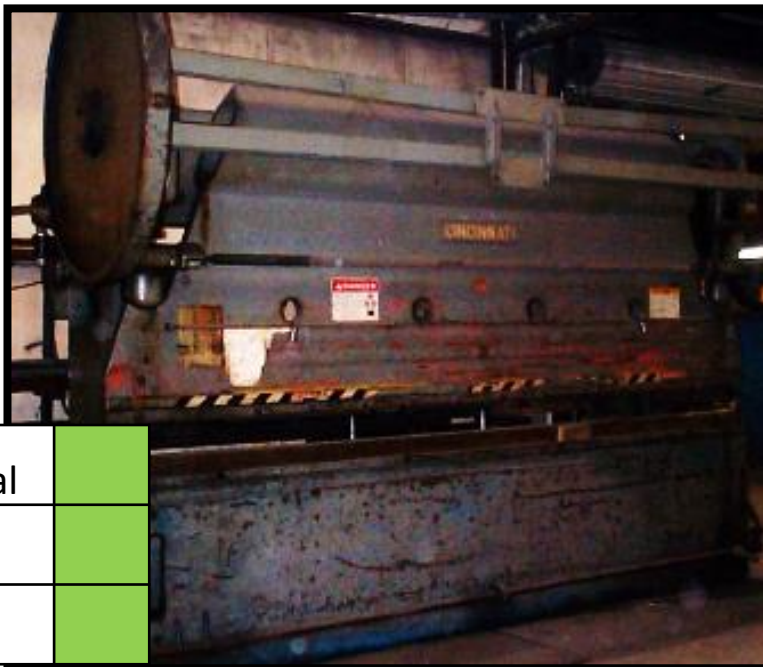


Structural - Equipment standardization

Before: Old, inefficient non standard equipment.

Now: Equipment is of similar type

Result: Easier to train, maintain, optimize, predictable, Energy efficient and safer



Environmental

Social

Economic





In-sourcing

Supply chain lead time reduction
Example: Timesaving

Result: Lead time reduced 10 days
 Cut cost of transportation
 New skills developed
 Part travel cost
 Inventory Reduction
 Improved Quality



Environmental	
Social	
Economic	



Kennedy Center Team - Partnership

In-sourcing of kitted items

Team members of different abilities brought on site.

Result:

- Lead time reduced 5 days
- New skills developed
- Part travel cost
- Inventory Reduction
- Improved Quality
- New friendships

Environmental	
Social	
Economic	





Community involvement

- 1 Charity event every month
- All organized by our employees
 - March madness for CF
 - Walk a mile in her shoes
 - Pink week
 - Monthly homeless shelter meals
 - St. Jude's golf tournament

Environmental	
Social	
Economic	





Pink ducks have migrated to ECA to help raise money!

\$3.00 per duck
Every duck is a winner!

Swim Times:

10/13, 10/14, 10/17 11:00am-12:30pm

Prizes:

Full Day Pto
½ day Pto
ECA Stadium Seats
Starbucks
ECA T-shirts
\$25 Stop & Shop Gift Cards
Cancer Awareness Merchandise





Playmakers: Pink Bake Sale

Pink Bake Sale! Friday October 21st

11am-1pm, 2-3 pm

Donations of baked goods appreciated, please bring baked items to the break room Friday morning. Please portion to sell with suggested price.

Thank you for participation!

All proceeds to The Hewitt Center for Breast Wellness

at Griffin Hospital





Spooner House

ECA To be honored for our
volunteer service and
generosity throughout the
years.
October 19th



*Join us for Spooner House's
2016 Annual Meeting Breakfast*



Wednesday, October 19 at Spooner House
30 Todd Road in Shelton
8:00 a.m. Registration & Tours
8:30 - 9:45 a.m. Meeting & Awards

Honoring:
Adams Hometown Markets
Electri-Cable Assemblies
Sikorsky, A Lockheed Martin Company
TEAM, Inc.
Woodland Regional High School Digital Media Team

Tickets are \$25 each and available online at
www.SpoonerHouseAnnualMeeting2016.eventbrite.com
or by calling (203) 225-0453 x 102 to reserve your spot.



Color Run



Bridgeport, CT Seaside Park

Registration will be done this week.
Will need information for guests.
Stephanie will provide further
information.

Charity: Bridgeport YMCA

Halloween October 31st



Wear Your
Monday October 31st!

***Participation is voluntary**

***Work appropriate**



Elimination of Secondary operations

- Laser cutting v's punch press
- Capacitance welding v's Pem or resistance welding



Environmental	■
Social	■
Economic	■



5S and teamwork across shifts

Focused Process improvement of existing -Easier,
Optimize machine understanding: Shine



Environmental

Social

Economic

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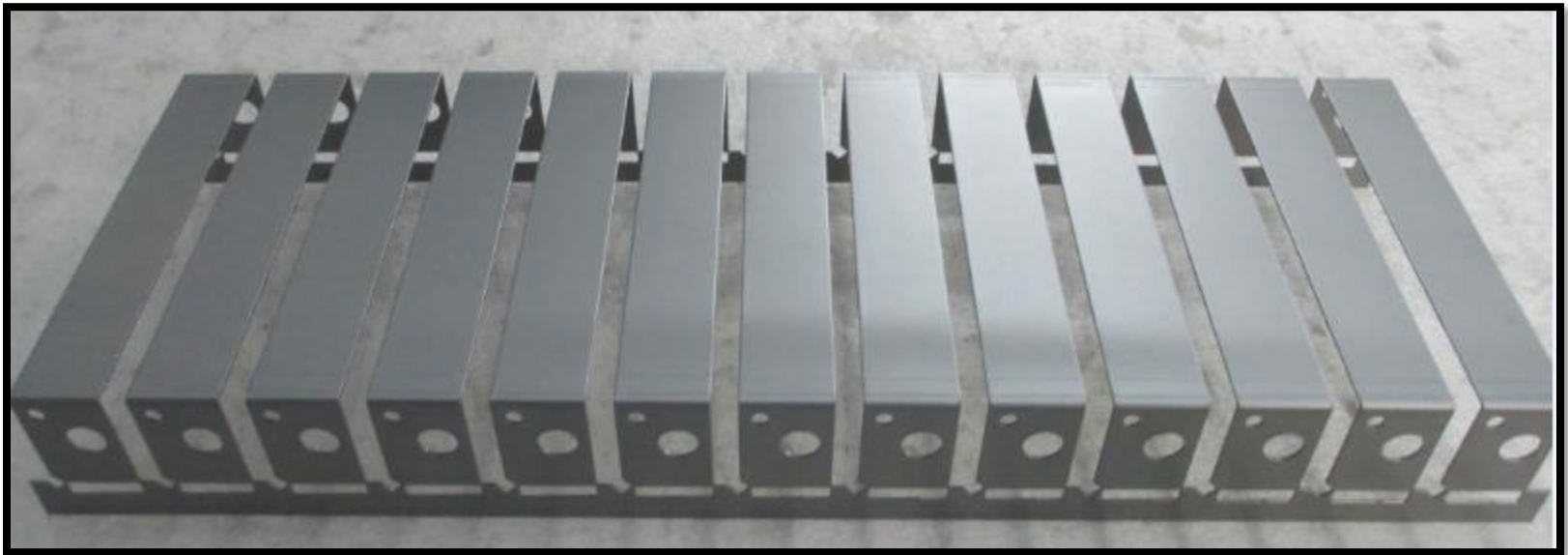
Share • Learn • GrowSM



Process improvement

Process improvement

- Designed for manufacturability.
- 2 bends v's 26



Environmental	
Social	
Economic	



SMED and Steal Shamelessly

- Equipment performance improvement – 7 colors a day
- Paint flexibility improvement - Steal shamelessly
- Paint ability

Environmental	
Social	
Economic	





KANBAN replenishment

Supply Chain

Tactical use of kanban

Reduced Set-up time, Scrap, Machine idle time,
obsolescence



Environmental	
Social	
Economic	



Product Design blitz

Existing Product review events

- Old approach: Fix errors when found
- New: DFM periodic blitz
- Result: 25% reduction in energy required to produce a Villa grommet.

FAB Operation Time, Stamping hits,
Bends, Fixture elimination,
Elimination of 2 Pems
Eliminated Deburr, Cut Paint changeover.
Cut Assembly time



Environmental	
Social	
Economic	



Design for Supply chain flexibility

Old: Silo design in a functional vacuum

New: Collaborative lean product design team effort.

80% common parts

Standard sizes

Flexible faces

Result: Excellent market response



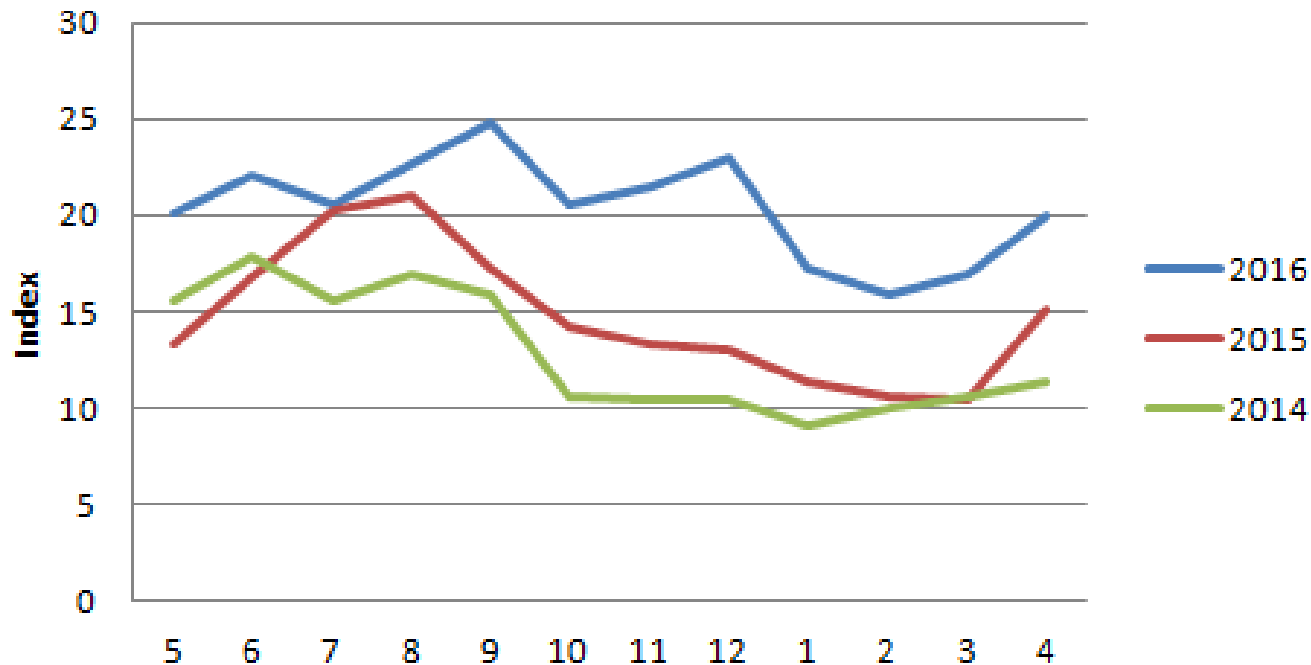
Environmental	
Social	
Economic	



Sustainability Results

- 60% Improvement in Energy consumption in 3 years
- 100% Parts painted per wash tank charge
- 30%+ Reduction in defects and scrap in 5 years

Monthly Energy Use Index





Sustainability Results

Multiple community service awards

Spooner house honoree 2016

Volunteer organization – Shelton, CT 2015

One employee is now a Spooner house board member

\$90k raised for St. Jude's in 3 years

Averaging 10 charity events a year

High level of Employee retention and internal promotion



In summary

Lean thinking and Environmental sustainability are in harmony, provided there is

- Trust
- Clear mission, vision, values and purpose
- True employee engagement
- Clear processes for change – SABA
- Persistence and Determination

Keep it within the Lean Production System



In summary

One of the first naturalists

Giovanni di Pietro di Bernardone 1182 – 1226

Preach the Gospel at all times and when necessary use words





Thank You!

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

Session: TP/05

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through lean**

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