

**CRAFT
BREWERS
CONFERENCE**
& BrewExpo America®

**Track & Yield:
A Winner's Guide to Safety
and Sustainability Key
Performance Indicators**

May 3

1:30 AM-2:30 PM CT



#CraftBrewersCon



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Sustainability Ambassador

BREWERS ASSOCIATION

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AGENDA



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AGENDA

“SaSu” means SAFETY and SUSTAINABILITY

Introduction

- SaSu commonalities
- Focus: high impact/low investment improvements
- Applicable to all sizes
- Examples
- Your participation
 - Slido Polls
 - Q&A

Indicators Primer

- **All About Indicators**
 - What are they?
 - Why use them?
 - How to use them?
- **Types of Indicators**
 - KPIs, OKRs, SMART
- **Indicator Selection**
 - Choices, pitfalls
 - Behavior modification

Examples and Resources

- **Safety Indicators**
 - Cultural/behavioral
 - Process monitoring
 - Cost/injury control
- **Sustainability Indicators**
 - Utilities
 - Environmental footprint
 - Cost
- **Additional Resources**
 - Downloads

ALL ABOUT INDICATORS



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What Are Indicators?

Performance Managing Indicators

Metrics that reflect how well stated goals and objectives are being achieved

Qualitative

Leading
Inward

OR

Quantitative

Lagging
Outward



Why Use Indicators?

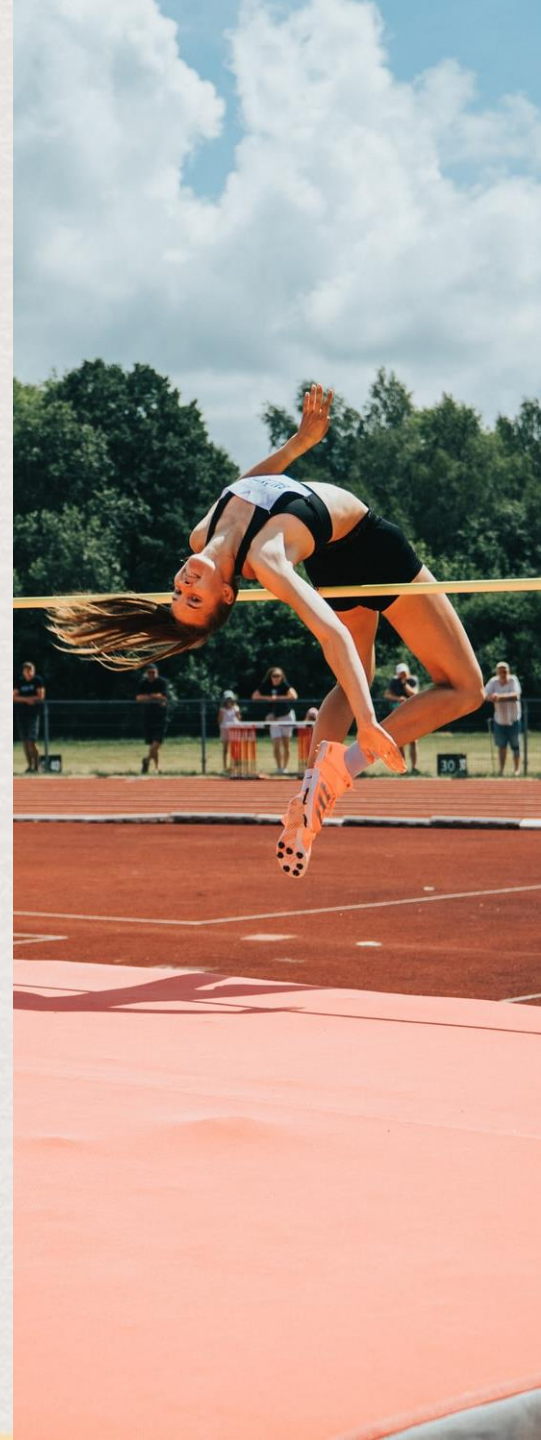
Scientists Say So

- In manufacturing ([Batti, et al. 2014](#))
- In NGOs ([de Waal, et al. 2011](#))
- In corporate responsibility ([Lyon 2004](#))

Low- to No-Cost

Co-Benefits

- Workforce Motivation
- Efficiency Improvement
- Quality/Big Picture Performance
- Corporate Image



How to Use Indicators?

- Measure human performance
- Track resource usage
- Assess progress towards goals
- Help improve business decision-making
- Building strategy for the future



Types of Indicators

	KPI	OKR	SMART
Acronym	Key Performance Indicators	Objectives & Key Results	Specific, Measurable, Attainable, Realistic, Time-Bound
Timeline	Annually	Quarterly	Annually
Outcome	Understanding Performance	Team Goals	Company or Dept Goals
Order of Operations	First	Following	Following
Who Creates Them?	Teams	Managers	CEO

INDICATOR SELECTION

Defining Sustainability

Brundtland Commission

Meeting the needs of the present without compromising the ability of future generations to meet their own needs



Defining Safety

US Department of Defense

Freedom from those conditions that can cause death, injury, occupational illness or damage to or loss of equipment or property, or damage to environment.

MIL-STD-882C ¶3.2.13



What Indicators Should I Use?

Data Quality Objectives

Think backwards from future decisions:

- Business decision-making
- Demonstrate achievement

What inputs (data)
will answer my
question?

AND

Are those inputs
obtainable, reliable,
trackable, durable?



Selecting Meaningful Metrics

Common Pitfalls

- Quantity: too much vs too little
- Complexity: easy vs difficult
- Bubble: insufficient involvement
- Value: relevance, recording zero values
- One-Track: ex. only fiscal
- Static: not tracking over period

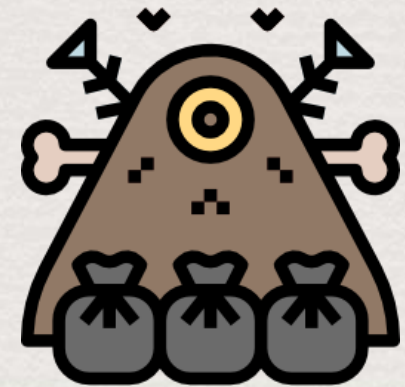
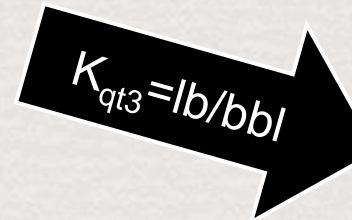
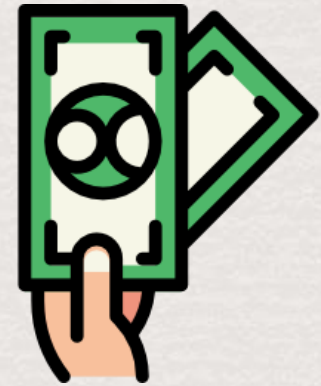
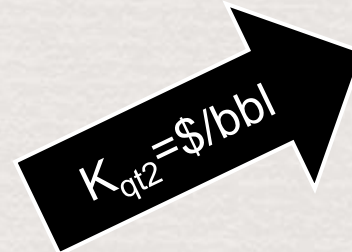
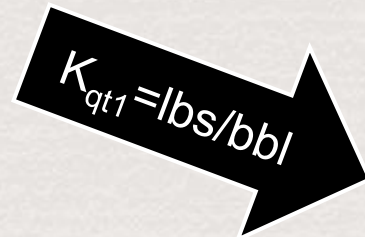
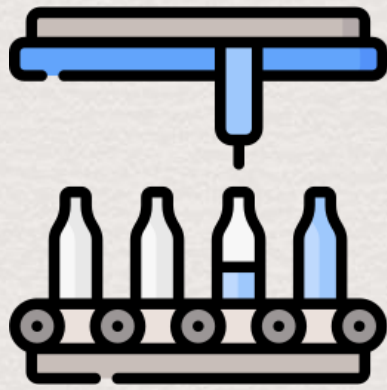
Behavioral Measurement Challenges

- Subjectivity
- Measurement design
- Behavior is product of beliefs, values, perceptions, experience, socialization

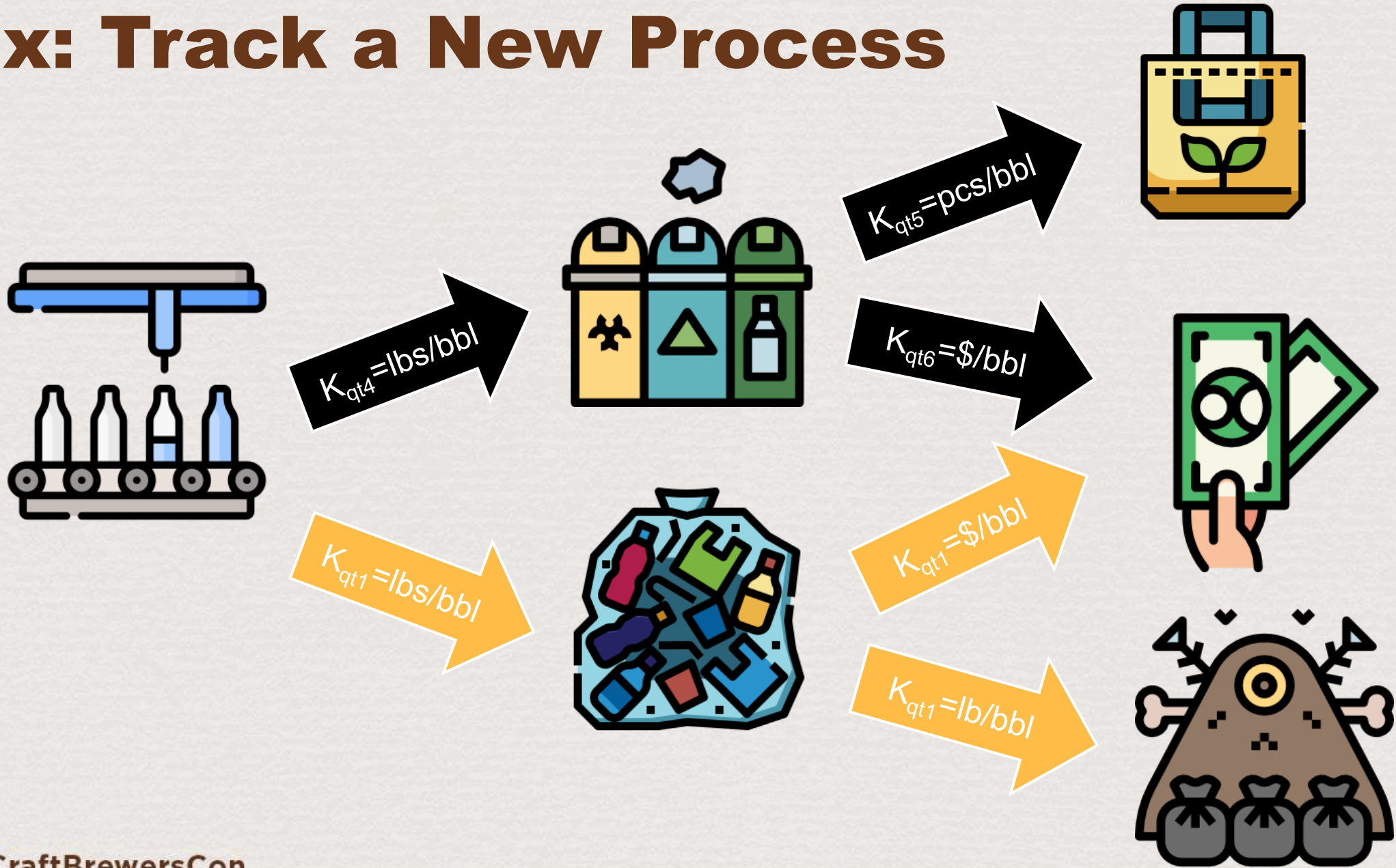
Use *both* Leading & Lagging Indicators, but Emphasize Leading When Possible



Visualizing KPIs



Ex: Track a New Process
















Safety Indicators

HISTORICAL, CULTURAL, PROCESS, COST

EXAMPLE SAFETY INDICATORS

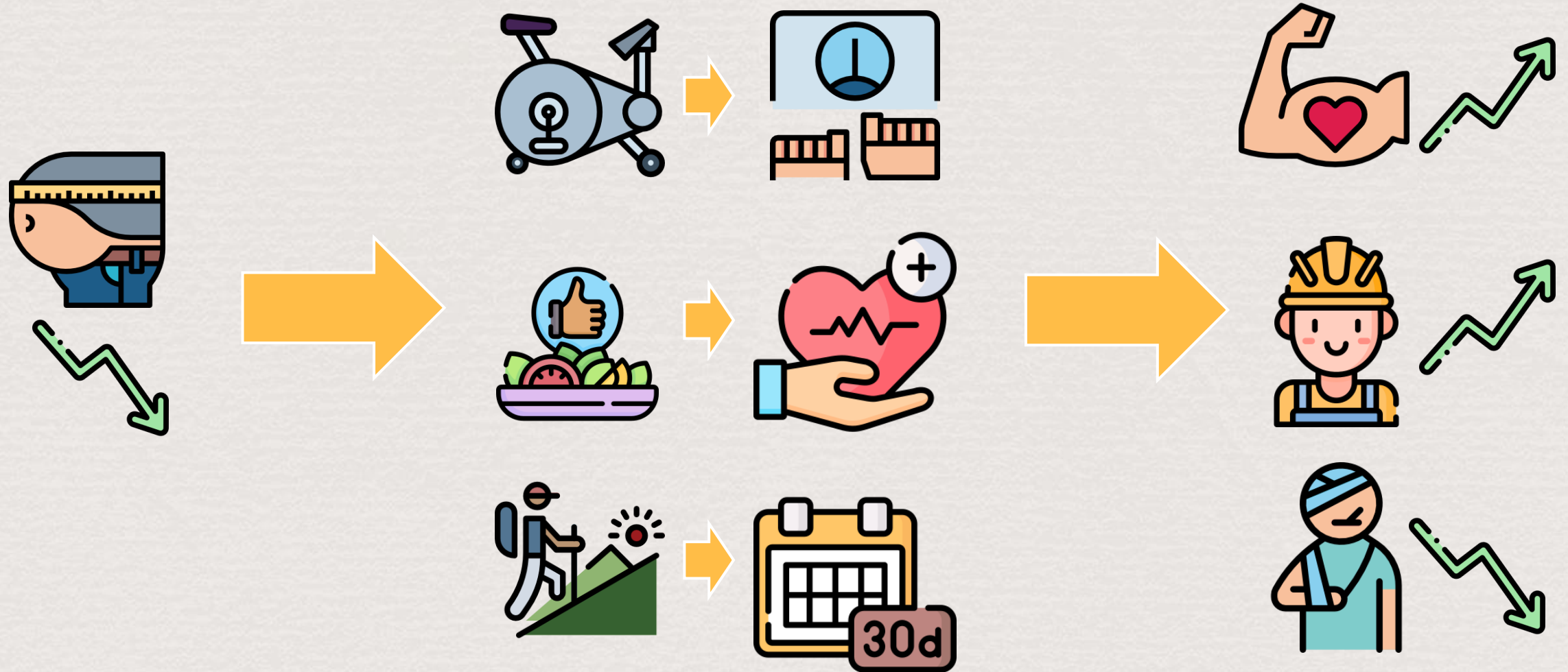
	LAGGING	LEADING
QUALITATIVE	 OSHA citations  Missed training deadlines	 Preventive maintenance schedule  Near miss reports  Employee perception of management commitment
QUANTITATIVE	 Sick rate or overtime rate  Total recordable injury rate (TRIR)  Worker's comp premiums (EMR)	 Training investment per capita, i.e., Total training hrs/yr x pay rate  Frequency of safety meetings, toolbox talks  Percent of management with safety training

KEY:  Highly Recommended  Recommended  Use with Caution

Wellness to Wellbeing Relationship



Wellness to Wellbeing Relationship








Sustainability Indicators

RESOURCES, FOOTPRINT, COST

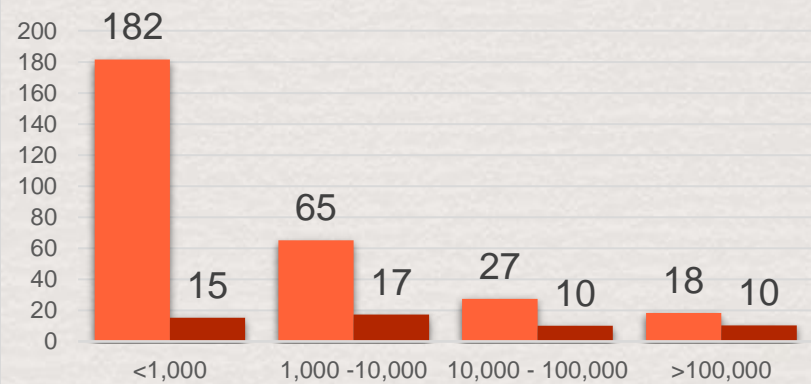
SUSTAINABILITY INDICATORS

	LAGGING	LEADING
Utility Indicators	 Normalized Utility Usage (monthly) <ul style="list-style-type: none"> • Electricity (kWh/bbl) • Natural Gas (therms/bbl) • Water (bbl/bbl) • CO2 Usage (lbs/bbl) • Solid Waste (lbs/bbl) 	 One point of contact to collect data, plug into analysis tool, and report out  Regular Green Team analysis meeting

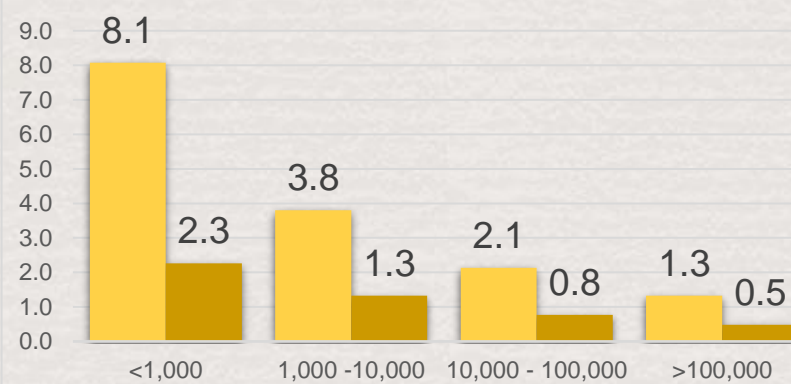
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SUSTAINABILITY INDICATORS

Electricity (kWh/bbl)



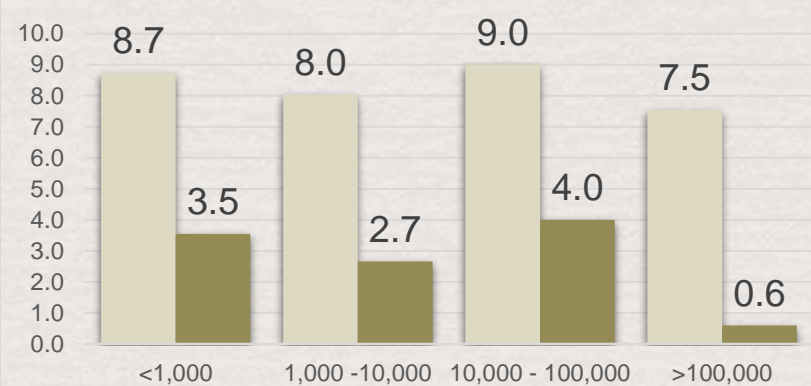
Fuel (therms/bbl)



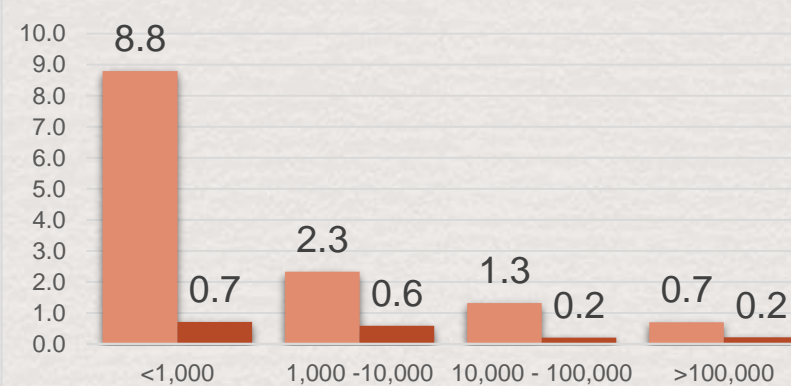
Water (bbl/bbl)



CO2 (lbs/bbl)



Waste (lbs/bbl)



Key








Median

Best in Class

Source:

2014-2021 BA Benchmarking Data

SUSTAINABILITY INDICATORS

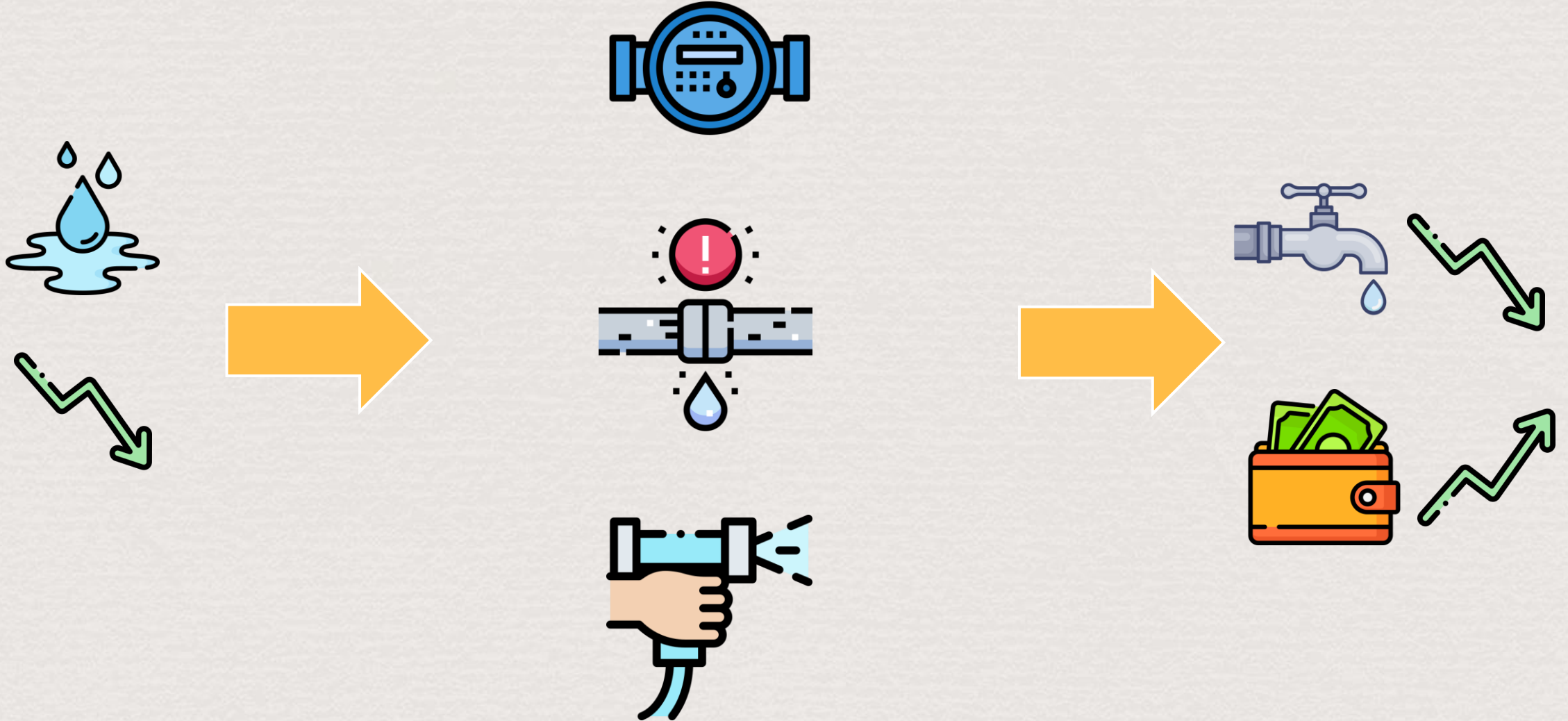
	LAGGING	LEADING
Direct Environmental Indicators	 GHG Emissions (CO ₂ e) <ul style="list-style-type: none"> • Scope 1: Direct • Scope 2: Indirect • Scope 3: Supply Chain  Wastewater <ul style="list-style-type: none"> • Volume (gal) • Strength (BOD,COD,TSS) 	 Supply chain miles  CO ₂ recapture
Cost Indicators	 Utility Fees (Normalized & Actual) <ul style="list-style-type: none"> • Energy Fees • Water/Wastewater Fees • CO₂ Fees • Waste Disposal Fees 	 Investment/reinvestment in sustainability projects  Contributions to environmental partners

KEY:  Highly Recommended  Recommended  Use with Caution

Water Use to Efficiency Relationship



Water Use to Efficiency Relationship



WRAPPING UP



BA Resources



BrewersAssociation.org

- Presentations
- Guidance
- Manuals
- Benchmarking
- Videos
- BA Forum
- More!



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Other Industry Groups



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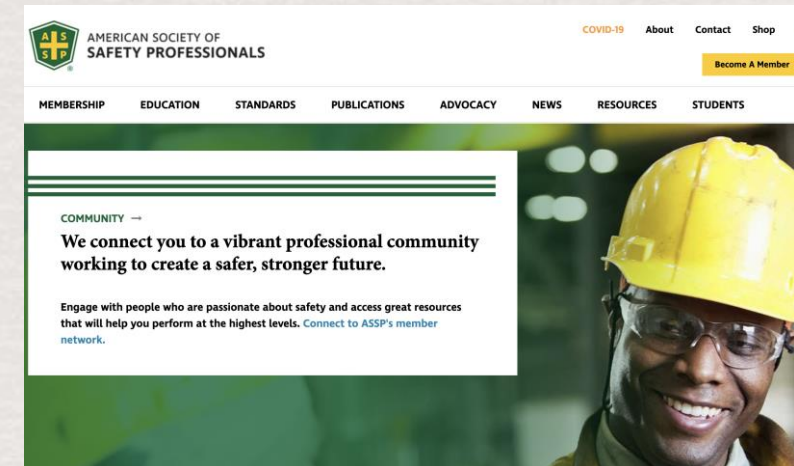


Sustainability - Trade Groups

- [National Barley Growers Association](#)
- [Hop Growers of America](#)
- [MBAA - Sustainability](#)

Safety - Trade Groups

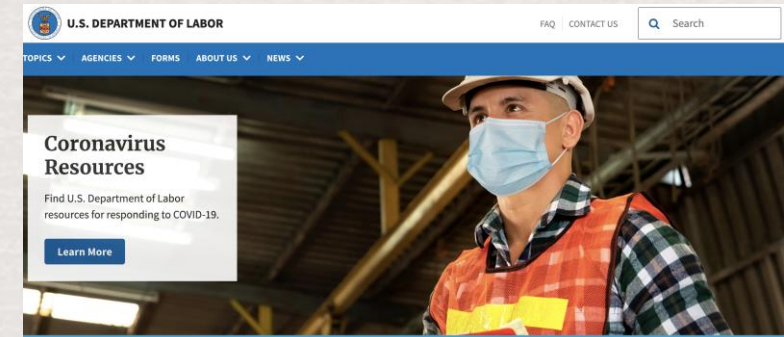
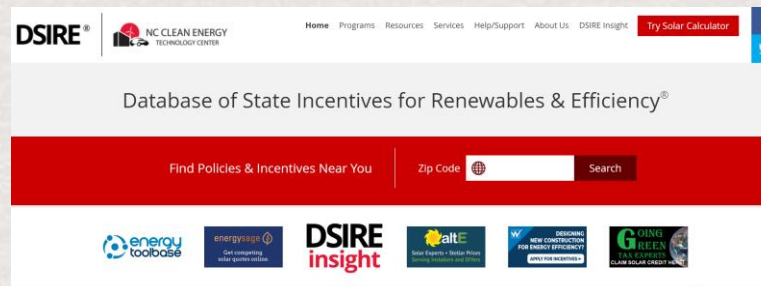
- [National Safety Council](#)
- [American Society of Safety Professionals](#)
- [MBAA - Safety](#)
- [ASBC – Lab Safety](#)



Government Resources

Sustainability – Government Resources

- [Database of State Initiatives for Renewables & Efficiency](#) (DSIRE)
- [Pollution Prevention Institute](#) (SBEAP)
- [Local Utility Incentives](#)



Safety – Government Resources

- OSHA
 - [Safety and Health Programs Bulletin](#)
 - [Find Free OSHA Consultation](#)
- NIOSH/CDC
 - [Well-Being Tools](#)
 - [PPE Resources](#)

SUMMARY



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KPI Review

- Setting the Baseline
- All About Indicators
 - What, Why, & How
- Types of Indicators
 - KPI vs. OKR vs. SMART
- Indicator Selection
 - Quantity, Complexity, Bubble, Value, One Track, Static
- Safety Indicators
- Sustainability Indicators
- Resources

Come meet us at
the BA Booth!

Matt G: Tue 3-4 PM &
Wed 11 AM – Noon

Matt S: Wed 2:30-3:30 PM
& Thu 1-2 PM



THANK YOU!

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