Human Capital and Occupational Health & Safety: How do you assess ESG materiality around your most valuable asset?

Kathy A. Seabrook, Chair of the Board, Center for Safety and Health Sustainability

Darryl C. Hill, Vice President, Global Health and Safety, Johnson Controls Inc
How to use Webex
The Human Capital - OHS Connection:
How do you assess ESG materiality around your most valuable asset?

Kathy A. Seabrook, Chair of the Board,
Center for Safety and Health Sustainability

Darryl C. Hill, Vice President
Global Health and Safety, Johnson Controls Inc.
- Sustainability
- Materiality
- Human Capital
- OHS
- Connection
Change is being Driven ... by the Market.
74% believe that Long Term Success means measuring and reporting total impact of their companies activities – social, environmental, fiscal and economic dimensions (non financial)

Source: PWC 2014 CEO survey – 1322 CEOs /77 counties
Customers,
Governments,
Reputation Risk...

...the Investment Community.
... and accountability
Countries with Social Reporting Regulations

- Spain
- EU
- Norway
- Malaysia
- India
- France
- UK
- ESG Reporting Standard - Broad Performance Metrics and KPIs
Sustainability Reporting Instruments/Countries (2016 *)

* Carrots & Sticks 2016 - GRI & KPMG
Materiality

“Firms with strong performance on material topics outperform firms with poor performance on material topics, consistent with material investments being shareholder value-enhancing.”

- March 2015
Corporate Sustainability: First Evidence on Materiality
Sustainability (Social/Labor Aspects)

Materiality

Human Capital

Workplace Safety & Health (OHS - Opportunities)
Key Materiality Sustainability Issues
By Industry Sector

SASB Materiality Maps™
- 34 / 83 Sectors (likely) -
OSH Material Issue
Performance

Human Capital & Workplace

Safety and Health

(OHS)
Our Sponsoring Organizations...
100,000 Countries

OH&S Professionals

70
Commitment...

...to advancing safe, healthy and sustainable workplaces around the world.
How do you assess ESG materiality around your most valuable asset?
Telling the Story...
Sustainability, Human Capital, Materiality & OHS Connection
(Dec 2015)
identify, measure, manage and report on an Orgs most material ESG issues.
Telling the Story…
Sustainability, Human Capital, Materiality & OHS Connection
(Dec 2015)

Transformational Change
Trends to Watch
OHS - Material

Southwire®

Nestle
Good Food, Good Life

ExxonMobil
Energy lives here™

MillerCoors®

Bombardier
the evolution of mobility

Intel®

TATA MOTORS

Enbridge
Supply Chain Accountability
C- Suite & Board Room
POLL

Has employee Safety and Health been identified as material ESG issue in your organization? Yes/ No
Value Creation
Greener Chemistry
Alternatives…

…Reducing Chemical Hazards
Greener & Safer
Good for...

...Employees, Customers and Communities
Lost-time injury and illness frequency rate, lost-time injury and illness severity rate, and number of fatalities (All employees/ workers - 5 year period).

Lost-time injury and illness frequency rate, lost-time injury and illness severity rate, and number of fatalities (All contractors - 5 year period).
% of owned or leased work locations that have implemented a Safety and Health management system that meets recognized standards
Management Systems PROACTIVELY Keep Organizations running smoothly in the face of RISK...
...Establish, implement, maintain and improve...OH&S Performance
Level of Assurance OH&S Risks & Opportunities are Identified, Assessed & Managed...
Ultimate Goal: Reducing Injuries, Ill Health & Fatalities
Mandatory Safety and Health Management systems

EU

26 Countries

Singapore

NORWAY

UK
ESG Reporting on Safety/Health Management Systems
% of owned or leased manufacturing, production, or warehousing facilities that have had their occupational safety health management systems audited.

% of direct/ or first tier suppliers’ facilities that were audited for compliance with safety and health standards.
Value Creation
The Human Capital - OHS Connection:
How do you assess ESG materiality around your most valuable asset?
As we continue to **align environmental, social and governance responsibilities with economic priorities**, Johnson Controls sees positive results for our business, our communities and our planet. We’re proud to be included on prestigious sustainability indices.

- **Dow Jones Sustainability Indexes**
- **FTSE4Good**
- **MSCI**
- **STOXX**
- **Maplecroft Climate Innovation Indexes**
  - Maplecroft CII Benchmark Index, #3 in 2012 — Includes 346 of the largest U.S. companies engaged in public climate-related programs
  - Maplecroft CII Leaders Index, #3 in 2012 — Includes 100 top-performing companies from the Maplecroft CII Benchmark Index
- **STOXX® Global ESG Leaders indices**
- **NASDAQ® OMX CRD Global Sustainability 50 Index**
Goldman Sachs study shows that investors could have increased returns 25% to 38% over past 4 years had they integrated workplace safety and health measures into their strategy.

Source: Were, 2007; Averill, 2011
SUSTAINABILITY
An integrated approach to Environmental, Social & Economic impact issues (both internal and external) leads to long term, sustainable profit growth.

ENVIRONMENTAL
- Permit & License Compliance
- Bio-diversity Management
- Emissions to Air
- Water/Chemical Usage and Discharges

SOCIAL
- Respect for the Individual
- Equality Opportunity
- Diversity
- Outreach Programmes
- Human Rights

ECONOMIC
- Consistent, Profitable Growth
- Risk Management
- Total Shareholder Return

ECO-ECONOMY
- Resource Efficiency
- Energy Efficiency
- Global Energy Issues

SOCIO-ECONOMIC
- Employment
- Training & Development
- Local Economies & Enterprise
- Social & Community
- Sponsorships
GLOBAL GROWTH
Ethical Leadership is viewed as a top priority by our key stakeholders.

Outstanding sustainability performance a key focus area

- Ethics and Supply Chain
  Ethics addresses the guidelines and systems in place to assure good decision making and stakeholders expect them to be in place for both owned and supply chain operations.

- Design for Sustainability and Product Compliance
  Expected to be managed through formal programs that are alert and responsive to changing concerns and regional differences.

- Talent Management and Safety
  Talent management cited as critical to success both externally and internally; as was concern for health and safety, which also rated highly across regional categories.

Top 10 Focus Areas
1. Innovation
2. Ethics
3. Supply chain ESG
4. Energy technology
5. Talent management
6. Design for sustainability
7. Occupational health and safety
8. Building efficiency
9. Vehicle efficiency
10. Product compliance

SOURCE: JCI Materiality Risk Assessment 2014
Johnson Controls Manufacturing System
Driving world-class performance

Foundation

- Customer focus
- Stable operations environment
- Organize around pull
- Zero tolerance for waste

Principles

- Safe workplace
- Empowered people
- Total quality
- Continuous improvement culture
- Value stream flow
- Material control
- Visual factory
- Environment & sustainability
- Design for manufacturing
Foundations

Customer Focus
Exceeding our customers’ increasing expectations.

Stable Operations Environment
Standardization, consistency, predictability and repeatability are fundamental. Problems are instabilities that must be surfaced quickly and solved permanently.

Zero Tolerance for Waste
Manufacturing activities that do not add value or fundamentally change the nature of the product or service – as defined by the customer – should be avoided and eliminated.

Organize Around Pull
A product should only be manufactured in response to specific demand signals and requests from a customer; materials and resources should be advanced only when downstream processes request them.
OHSAS 18001 certification benefits

• Reduced incident and accident rates (42% TRIR decrease over 3 years*)
• Inspection waiver in some states if 18001 certified
• Better control of OH&S risks
• Decrease in overall costs of accidents (25% reduction in accident costs over 3 years*)
• Decrease in insurance premiums (18% reduction in workers’ comp costs*)
• Improved levels of compliance to health and safety legislation
• Reduced likelihood of fines and prosecutions
• Improved reputation and stakeholder satisfaction
• OHSAS 18001 is Level 3 requirement; 20K registrar cost and avg. payback in 2-3 months*

* EHSIS vendor client companies (2016)
## JCMS Maturity Level Summary

<table>
<thead>
<tr>
<th>Safe Workplace</th>
<th>Empowered People</th>
<th>CI Culture</th>
<th>Value Stream Flow</th>
<th>Material Control</th>
<th>Visual Factory</th>
<th>Total Quality</th>
<th>Environment &amp; Sustainability</th>
<th>Design for Manufacturing</th>
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<td><strong>Level 5 Distinguished</strong></td>
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<td>Enbrid Safety requirements in equipment design</td>
<td>95% membership in High Performance Teams</td>
<td>Zero downtime due to sparse parts shortages</td>
<td>Lead time and value added within 5% of benchmark</td>
<td>Material Location Accuracy ≥ 99%</td>
<td>Integrate MES system into ERP</td>
<td>Standard labor time at benchmark</td>
<td>Poke yoke embedded in designs</td>
<td>Zero Deviation Authorizations (DAs) at SOP</td>
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<td>100% of employees active in Safety Audits</td>
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<td><strong>Level 4 Excellent</strong></td>
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<td>Highly Protective Risk (HP) certified</td>
<td>Engagement scores ≥ 90% with robust action plans</td>
<td>Implement 100% of best practices</td>
<td>Utilize 100% of standard packaging</td>
<td>Manufacturing Execution System (MES) in place</td>
<td>Inventory levels consistently better than plan</td>
<td>5S audit results ≥ 80%</td>
<td>Energy audit conducted across 5 Energy Management Practices</td>
<td>MISO actions closed prior to Start Of Production (SOP)</td>
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<td>Machine Utilization (MU) ≥ 80%</td>
<td>Machine Utilization (MU) ≥ 80%</td>
<td>Inventory Accuracy ≥ 95%</td>
<td>Inventory Accuracy ≥ 95%</td>
<td>Unit Audit ≤ 15 minutes</td>
<td>Cost of poor quality improvement [YOY]</td>
<td>2% YOY energy intensity improvement</td>
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<td>&lt; 90% of employees trained in Simple Problem Solving (SPS)</td>
<td>&lt; 90% of employees trained in Simple Problem Solving (SPS)</td>
<td>Value Stream Map (VSM) on ≥ 90% of product lines</td>
<td>Value Stream Map (VSM) on ≥ 90% of product lines</td>
<td>Schedule attainment ≥ 95%</td>
<td>Implement Visual control standard</td>
<td>Perform Monthly environmental audits</td>
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<td>Learning modules cascaded to shop floor employees</td>
<td>Learning modules cascaded to shop floor employees</td>
<td>YOY improvement in lead time and value-add process</td>
<td>YOY improvement in lead time and value-add process</td>
<td>Implement Warehouse Management System</td>
<td>Implement Visual control standard</td>
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<td>Voluntary turnover ≤ regional benchmark</td>
<td>Voluntary turnover ≤ regional benchmark</td>
<td>Lean kaizen events ≥ 12 per year</td>
<td>Lean kaizen events ≥ 12 per year</td>
<td>Cost of poor quality improvement [YOY]</td>
<td>Implement Visual control standard</td>
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<td>&gt; 50% of best practices implemented</td>
<td>&gt; 50% of best practices implemented</td>
<td>Conduct 12 Kaizens per year</td>
<td>Conduct 12 Kaizens per year</td>
<td>Cost of poor quality improvement [YOY]</td>
<td>Implement Visual control standard</td>
<td>Consult MISO at plant with Simultaneous Development Team (SDT)</td>
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<td>High Performance Team (HPT) pilot launched in plant</td>
<td>High Performance Team (HPT) pilot launched in plant</td>
<td>CI professional trip certified (RT, Lean, 6 Sigma)</td>
<td>CI professional trip certified (RT, Lean, 6 Sigma)</td>
<td>Value Stream Map (VSM) complete and define future state</td>
<td>Implement Visual control standard</td>
<td>Consult MISO at plant with Simultaneous Development Team (SDT)</td>
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<td>Document Kaizen events in CI Trac</td>
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<td>Implement Material Replenishment Standard</td>
<td>Post Quality alerts</td>
<td>Consult MISO at plant with Simultaneous Development Team (SDT)</td>
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<td>Consult MISO at plant with Simultaneous Development Team (SDT)</td>
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<td><strong>Level 3 Meets</strong></td>
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<td>OHSAS 18001 certified</td>
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<td>Total Recordable Incident Rate &lt; 0.75</td>
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<td><strong>Level 2 Developing</strong></td>
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<td>Implement Lockout/Tagout standard</td>
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<td>Risk assessment documented for all workstations</td>
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<td>CI professionals trip certified (RT, Lean, 6 Sigma)</td>
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<td>Document Kaizen events in CI Trac</td>
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<td>Implement Material Replenishment Standard</td>
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<td>Value Stream Map (VSM) complete and define future state</td>
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<td>Implement Visual control standard</td>
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<td>Establish monthly inventory reporting and targets</td>
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<td>Implement Cycle Count standard</td>
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<td>SS training cascaded to shop floor employees</td>
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<td>Document supplier quality issues for resolution</td>
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<td>Implement First Part Approval process</td>
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<td>Utilities Material Safety Data Sheets (MSDS)</td>
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<td>Complete hazardous material training</td>
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<td>Manufacturing Signs Off (MISO) issues documented with robust action plans</td>
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<td><strong>Level 1 Not Meeting</strong></td>
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<td>Safety committee established</td>
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<td>Documented audit requirements is available</td>
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<td>Complete annual salaried performance reviews</td>
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<td>G6S scores ≥ prior year</td>
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<td>Only CI professionals load improvements</td>
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<td>Total Preventive Maintenance (TPM) training complete</td>
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<td>Implement Quick changeover</td>
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<td>Inventory performance monitored</td>
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<td>Materials Requirements Planning (MRP) process established</td>
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<td>Create 5S plant zone map</td>
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<td>Plant escalation based on machine downtime</td>
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<td>Implement Statistical Process Control (SPC)</td>
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<td>Document PFMEA and control plan</td>
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<td>Complete emergency evacuation drill</td>
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<td>Manufacturing Signs Off (MISO) completed on time</td>
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*Bold = unmet manufacturing practices*
Questions

The Human Capital - OHS Connection:
How do you assess ESG materiality around your most valuable asset?