



Best Practice Guidance: Investment Recovery

Investment Recovery Association Conference
March 7, 2016



Professional Education Clarification.....



BS Degree



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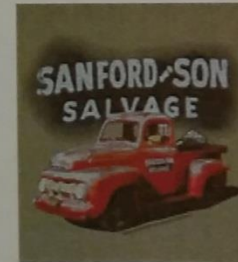
Russell N. Wilkenloh



by the

Fred G. Sanford

School of Garbology



April 2006



Fred G. Sanford

Fred G. Sanford, President





**ELECTRIC UTILITY INDUSTRY
SUSTAINABLE SUPPLY CHAIN ALLIANCE**

Our Vision –

To be known as the leader in developing voluntary standards for a robust and sustainable electric utility industry supply chain including advancing the maturity level of utilities and stakeholders.

Develop
voluntary
standards

Share
Best
Practices

Scope of influence includes
non-fuel spend, Utility
Supply Chain Operations



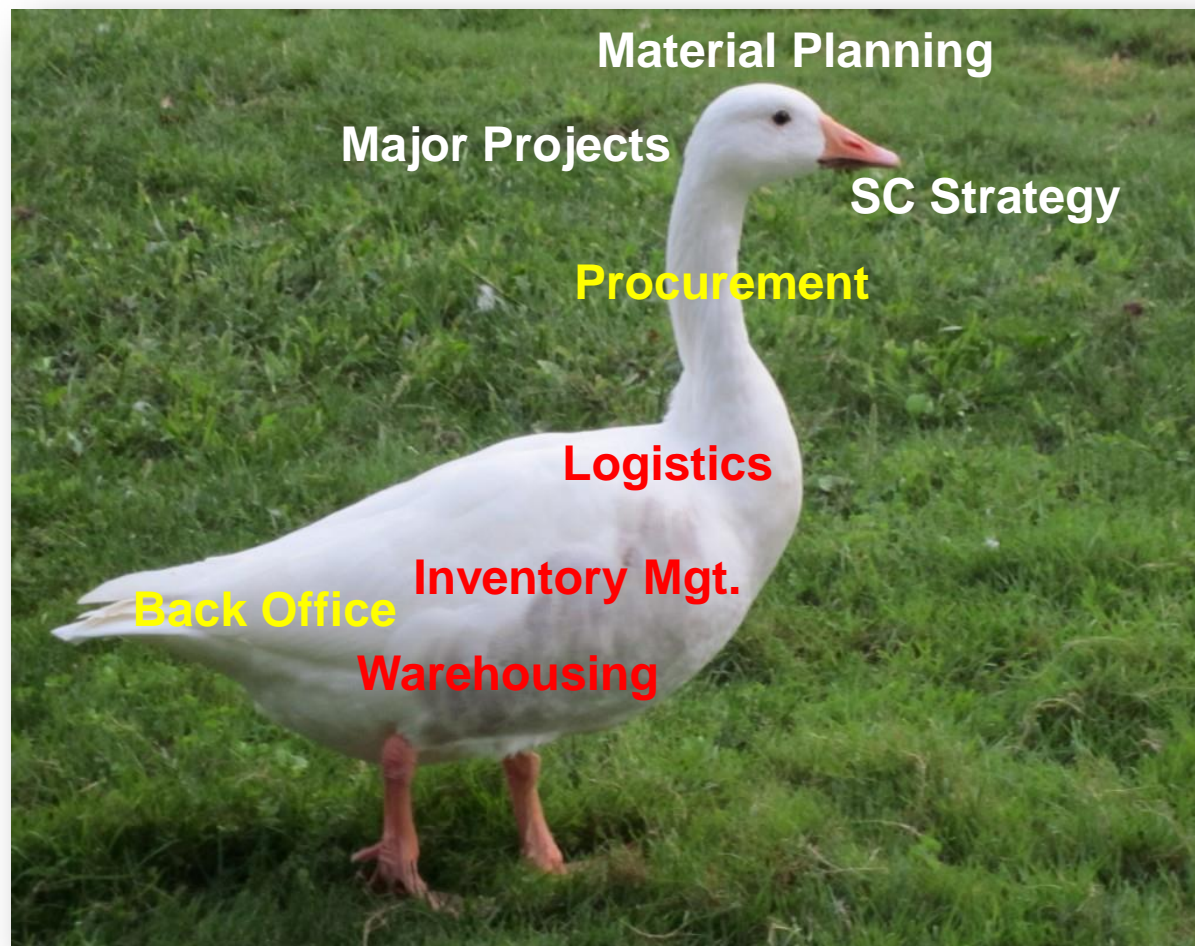
BONNEVILLE
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An EDISON INTERNATIONAL® Company

Supply Chain Model

Investment Recovery



Investment Recovery Sustainability:

Today's topics

1. Background and approach
2. IR sustainable best practices
3. Questions

Background & Approach

- Committed to create 3 Best Practice documents by 2018
- Investment Recovery was identified as the priority
- IR team selected by Alliance Utilities
- Conducted baseline interviews with participating utilities
- Conducted an Investment Recovery Association “Speed Dating” exercise
- Consolidated more than 100 IR concepts into six main categories
- Discussed best practices for specific commodities
- Organized concepts by greatest sustainability impact for least effort and expense
- Conducted legal and peer reviews

Investment Recovery Team Members

- **Ameren** - Todd Richter, Aitor Barrio, Jackie Johnson
- **Duke** - Russ Wilkenloh (Chair)
- **DTE** - Venus Randle, Michelle Eldridge
- **Eversource** - Joy Woolley, Jennifer Hart
- **Exelon** - Eric Vincent, John Gallaher, Jacob Kmetz, Thomas Hennessy, Bill Gallagher
- **OGE** - Sherryl Love, Chris Dickson
- **Western Equipment Dealers Association** - Julie Niemann, Jane Male

Primary Function of Investment Recovery: sell or repurpose materials and equipment



Reuse or repurpose of materials and equipment is the highest level of sustainability ... avoid introduction into the waste stream.

IR materials and equipment

60% - 75% of Investment Recovery revenues and recycled volumes are scrap commodities managed through vendors

- Scrap Metals
- Scrap Wire & Cable
- Scrap Transformers
- Used Transformer Oil
- Used Fleet & Lube Oil
- Meters
- Plastics
- Treated Wood
- Untreated Wood
- Electronics
- Lighting, Light Bulbs
- Batteries

Scrap Metal, Wire, and Cable



Scrap Transformers



Used Transformer Oil



Used Motor & Lube Oils



Scrap Plastics



Scrap Wood



Scrap Electronics, Meters, Lighting



Summary of Best Practices for Investment Recovery for Utilities

1. **Incorporate** desirable sustainability practices in the Investment Recovery Bid Process
2. **Measure** waste reduction and recycling improvement
3. **Align** IR **with** other **Supply Chain** functions to improve performance and reduce waste
4. **Align** IR function **with organizations** outside of the Supply Chain and/or Company
5. **Consider** alternative disposal practices
6. **Summarize** IR Best Practices for specific commodities

1. Incorporate desirable sustainability practices in the Investment Recovery Bid Process

- a) Sustainability Components included in the competitive bidding process (High Impact, Medium Effort)
- b) Assess sustainability impacts related to processing Recycling Commodity By-Products (Medium Impact, Low effort)
- c) Assess sustainability impacts related to processing commodities for sale and recycling - Processing location/domestic or other (Medium Impact, Low Effort)
- d) Use of diverse vendors (Tier I and Tier II) to manage IR commodities. (Medium Impact, Low Effort)
- e) Include the governance functions of the environmental group and legal group for developing waste and recycling contracts, performing environmental audits (Medium Impact, Medium Effort)

2. Measure waste reduction and recycling improvement

Report all weight and revenue to corporate sustainability team as part of tracking purposes for corporate reporting.

(Medium Impact, Medium Effort)

Start by understanding total waste:

Total Landfill (weight) + Total Recycling (weight)
= Total Waste Stream (weight)

Then calculate diversion rate:

Total Recycling / Total Waste Stream
= Total Recycling % (or diversion rate)

3. Align IR with other Supply Chain functions to improve performance and reduce waste

- a) Engage vendors about buyback options for used/new products; right-sizing of packaging, logistical improvements
- b) Better **Material Planning** to reduce excess
- c) Facilitate the reuse/redeployment of materials internally within the company, or externally with other utilities (materials returned, sharing between warehouses, business units, other utilities)

4. Align IR function with organizations outside of Supply Chain and/or Company

- a) Improve sustainability performance by engaging and educating employees on IR for waste reduction and recycling improvement (High Impact, Medium Effort)
- b) Build a network with other utilities through UPMG, USMA, Rapid, Investment Recovery Association and other alliances (Medium Impact, Medium/High Effort)

5. Consider alternative disposal practices

Establish unique partnerships with community groups to facilitate under utilized labor resources/create jobs
e.g., Goodwill Industries (High Impact, Medium Effort)



6. Summarize Best Practices

Types of Practices	Description	Benefit	Impact	Effort	Utility Responsibility	6a. Metals/Cable	6b. Metals	6c. Transformers	6d. Transformer Oil	6e. Lighting	6f. Light Bulbs	6g. Recycle Lead Acid Batteries	6h. Electronics	6i. Wood	6j. Used Oil	6k. Plastics, H&DP
Certifications	Industry-specific certifications relative to desirable recycling and waste management practices	Demonstrates vendor compliance with industry- approved recycling and waste management standards. Environmental, Legal	High	Low	IR, Environmental, Legal	X	X	X	X	X	X	X	X		X	
Processing of waste*	Management of waste by-products that are peripheral to the primary category of recycled commodity	Legal and Environmental - Control of waste stream. Improved rate of recycling.	High	Low	IR, Environmental	X	X	X	X	X	X	X	X	X	X	
Closed-loop recycling*	Documentation of downstream recycling and landfill disposition	Legal and Environmental - Control of waste stream	High	Medium	IR, Environmental, Legal	X	X	X	X	X	X	X	X	X	X	
Single-source processing	Combining different but related commodities together in a single collection point for recycling by a vendor	Reduction of utility effort to source-separate materials for processing (improved rate of recycling, better use of internal labor resources/ economic)	High	Low/ Medium	IR, Facilities Management, Operations	X	X			X			X			X
Peripheral recycling*	Combining disparate commodities together for recycling management by a single vendor	Reduction of utility effort to source-separate materials for processing (improved rate of recycling, better use of internal labor resources/ economic)	High	Low/ Medium	IR, Facilities Management, Operations	X	X			X			X		X	X
Sustainability alignment with vendor	Sustainability culture and practices of the vendor are aligned with the sustainability culture and practices of the utility.	Sustainability alignment; assurance of sustainable waste management aligned with utility's sustainability philosophy.	High	Medium	IR, Sustainability Group	X	X	X	X	X	X	X	X	X	X	X
Vendor community involvement / Vendor Diversity	Recycling vendor is engaged and supportive of the utility's community in which they operate. Recycling vendors are evaluated similarly as diverse suppliers, as well as second-tier subcontractors	Philosophical alignment with utility. Alignment with Utility Supplier Diversity philosophy and measures	High	Medium	IR, Corporate Responsibility, Supply Chain Supplier Diversity	X	X	X	X	X	X	X	X	X	X	X
Specific Commodity Processes	Support of specific best practices related to specific waste stream commodities	Improved commodity management through industry best sustainable practices.	High	Medium	IR, Environmental, Facility Management			X	X		X	X		X	X	

1.Incorporate. 2.Measure. 3.Align w/Supply Chain. 4.Align w/org. 5.Consider. 6.Summarize

6. Summarize Best Practices

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Certifications	Industry-specific certifications relative to desirable recycling and waste management practices	Demonstrates vendor compliance with industry-approved recycling			IR, Environmental,	X	X	X	X	X	X	X	X		X	
Processing of waste*	Management of waste by products that are peripheral primary category of recycling commodity				Environment		X	X	X	X	X	X	X	X	X	
Closed-loop recycling*	Documentation of downstream recycling and landfill disposal					X	X	X	X	X	X	X	X	X	X	
Single-source processing	Combining different but related commodities together in a collection point for recycling vendor.					X	X			X			X			X
Peripheral recycling*	Combining disparate commodities together for recycling management by single vendor				essent, s	X	X			X			X		X	X
Sustainability alignment with vendor	Sustainability culture and practices of the vendor are aligned with the sustainability culture and practices of the utility				ustainability	X	X	X	X	X	X	X	X	X	X	X
Vendor community involvement / Vendor Diversity	Recycling vendor is engaged and supportive of the utility's community in which they operate. Recycling vendors are evaluated similarly as diverse suppliers as well as second-tier subcontractors				erate ability, gain diversity	X	X	X	X	X	X	X	X	X	X	X
Specific Commodity Processes	Support of specific best practices related to specific waste stream commodities				Environmental, management			X	X		X	X		X	X	

Major Commodities:

- Metal/Cable
- Meters
- Transformers
- Transformer Oil
- Lighting
- Light Bulbs
- Lead Acid Batteries
- Electronics
- Wood
- Used Oil
- Plastics/HGDP

6. Summarize Best Practices

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Certifications	Industry-specific certifications relative to desirable recycling and waste management practices	Demonstrate with industry and waste management Environment											X		X	
Processing of waste*	Management of waste by-products that are peripheral to the primary category of recycled commodity	Legal and waste stream											X	X	X	
Closed-loop recycling*	Documentation of downstream recycling and landfill disposal												X	X	X	
Single-source processing	Combining different commodities for collection and recycling by a vendor.	(improved rate of use of internal economic)											X			X
Peripheral recycling*	Combining disparate commodities together for recycling management by a single vendor	Reduction of separate materials (improved rate of use of internal economic)											X		X	X
Sustainability alignment with vendor	Sustainability culture and practices of the vendor are aligned with the sustainability culture and practices of the utility.	Sustainability of sustainable aligned with utility philosophy.											X	X	X	X
Vendor community involvement / Vendor Diversity	Recycling vendor is engaged and supportive of the utility's community in which they operate. Recycling vendors are evaluated similarly as diverse suppliers, as well as second-tier subcontractors	Philosophical Alignment with Diversity philosophy and measures			Supplier Diversity								X	X	X	X
Specific Commodity Processes	Support of specific best practices related to specific waste stream commodities	Improved commodity management through industry best sustainable practices.	High	Medium	IR, Environmental, Facility Management			X	X		X	X		X	X	

Types of Practices:

- Certifications
- Processing of waste
- Closed-loop Recycling
- Single-source processing
- Peripheral recycling
- Sustainability alignment with vendor
- Vendor community involvement/ vendor diversity
- Specific commodity processes

8 Best Practices for Specific Commodities

1. Certifications: Industry-specific certifications relative to desirable recycling and waste management practices

- R2/RIOS Certification
- E-Stewards Standards 2.0
- ISO 9000
- ISO 14000
- OHSAS18000
- Green Supplier Network

2. Processing of Waste – Internal & External By-product Recycling: Management of waste by-products that are peripheral to the primary category of the recycled commodity

- Approval of waste & disposal vendors
- Approve Owners/Operators of landfills
- Approve Oil-recycling process
- Monitor & approve of waste generated vs. shipments of commodities
- Defined parameters/target levels to reduce waste

8 Best Practices for Specific Commodities

3. Closed Loop Processing:

- Documentation of downstream vendors – Downstream vendors are documented by the vendor and approved by the utility to recycle the material for the utility. Ability for the utility to approved the processors of the material and approve the consumer outlets for the material

4. Single Source Processing: Combining different but related commodities together in a single collection point for recycling by a vendor

- Allow combining multiple commodity variations in a single collection point to reduce utility effort and promote recycling.
- Examples: - Wooden reels, pallets, crates, scrap lumber
- ferrous metals, non-ferrous metals

5. Peripheral Recycling: Allow combining of peripheral materials with the primary commodity at the generating location to promote recycling, reduce waste and improve the logistics of transporting material to be recycled

- Example: cable, ceramics, conduit

8 Best Practices for Specific Commodities

6. Sustainability Alignment with Vendor: Sustainability culture and practices of the vendor are aligned with the sustainability culture and practices of the utility

- Sustainable practices related to air, water, waste, energy, waste management, recycling improvement

7. Vendor Community Involvement / Vendor Diversity:

- Recycling vendor is engaged and supportive of the utility's community in which they operate.
- Recycling vendors are evaluated similarly as diverse suppliers, second-tier subcontractors

8. Specific Commodity Processes: Support of best practices related to specific waste stream commodities

- Practices identified by various vendors utilized by alliance members
- Transformer oil
- Transformer recycling practices
- Light bulbs
- Wood

Wrapping up and Next Steps

- Six major IR sustainability themes:
 1. **Incorporate** desirable sustainability practices in the Investment Recovery Bid Process
 2. **Measure** waste reduction and recycling improvement
 3. **Align** IR **with** other **Supply Chain** functions to improve performance and reduce waste
 4. **Align** IR function **with organizations** outside of the Supply Chain and/or Company
 5. **Consider** alternative disposal practices
 6. **Summarize** IR Best Practices for specific commodities
- Utilities should review current state and perform a gap analysis
- “EUISSCA Investment Recovery Sustainability Guidance” is a living document

Investment Recovery Sustainable Best Practices document is available on the Alliance website under the “Resource” section:

<http://euissca.org/resources>

Contact information is required to access the document; but once entered, all Alliance best practice documents are made available.

Questions?



Thank You!

