



*Ensuring Compliance,
Enhancing Safety and ESG
Ratings through digital shipping
documents*

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Paper Shipping Documents

- Truck Tickets
- Bill of Ladings (BOLs)
- *Waste Manifests (Hazardous/ Non-Hazardous)*
- *Transportation of Dangerous Goods (TDG)*
Shipping Documents

Why are Shipping Documents Required?



East Palestine, Ohio



Tucson, Arizona



Compliance Challenges

- Legibility
- Completeness
- Accuracy
- Visibility
- Multiple parties involved
- Filing for 2 years; annual reporting
- Remote work in the post-pandemic world

E = Environmental

Scope 3 Challenge

- March 2022: Securities and Exchange Commission (SEC) Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors
- April 2022: Federal government budget - mandatory ESG disclosure for banks and insurance companies in 2024
- October 2022: ISSB voted unanimously to require company disclosures on Scope 1, Scope 2 and **Scope 3** greenhouse gas (GHG) emissions

ISSB = International Sustainability Standards Board

- March 2023: Office of the Superintendent of Financial Institutions (OSFI) published their expectations for the management of climate-related risks.

E = Environmental

Scope 3 Challenge

- Fragmented industry
- Supply Chain isn't digitalized, mostly paper-based or manual processes
- Digital solutions are few and mostly desktop based driven by accounting requirements
 - Gathering ESG data from paper forms is tedious
 - Scope 3 is a tough nut to crack !



S = Social

Regulations require shipping documents to accompany Dangerous Goods, however, when an Emergency event occurs, Emergency Responders cannot access those paper documents from the Truck.

We have lost sight of the real reason for the regulations – public safety!

G = Governance

- Paper forms do not provide any transparency
- Carriers have too much discretion, at the same time, drivers struggle with paperwork

Paper based processes: illegible + erroneous + inefficient = obsolete

Why Go Digital?

- Emergency Responders can't always access reliable information – their Safety is at stake
- Consignors are responsible for compliance
- ESG report data gathering is a herculean task
- Do more with less: need efficiency

Transport Canada announced \$136 million for industry-led digitalization in supply chain



Transport Canada Regulatory Sandbox Project



LEARNINGS

- Enables first responders to access information without approaching potentially hazardous situations
- Enables faster sharing of information and improving accuracy
- Significantly reducing paper and ink usage
- 7 company pilot, 21 million sheets of paper saved over 2 years

Transport Canada Requirements

EQUIVALENCY CERTIFICATE

- Consignor/shipper or Carrier can apply
- e-TDG shipping document be available, immediately upon request
- Logistics of making it available
- Delegation to Carrier
- Robust Workflow
- Documentation for residue
- Stakeholder consultation

Scope 3 GHG Emissions



ESG Standards



Disclosure 306-2

Management of significant waste-related impacts

Reporting requirements

The reporting organization shall report the following information:

- a. Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated.
- b. If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations.
- c. The processes used to collect and monitor waste-related data.

Guidance for Disclosure 306-2-c

The processes that the organization has in place for collecting and monitoring waste-related data can reflect its commitment to managing waste-related impacts. Such processes can include online data entry, maintaining a centralized database, real-time weighbridge measurement, and annual external data validation.

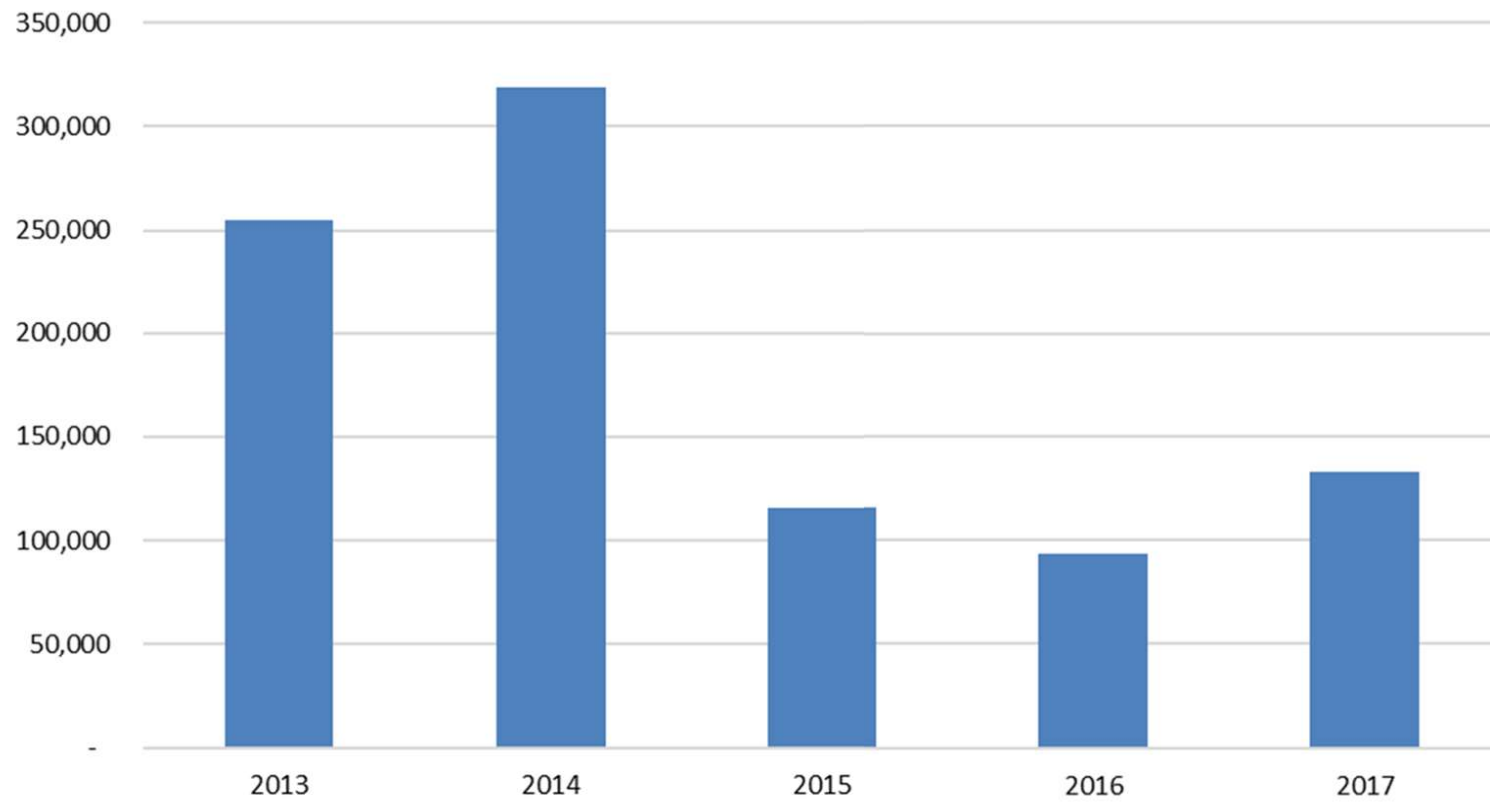
**“What gets measured gets managed”
– Peter Drucker**

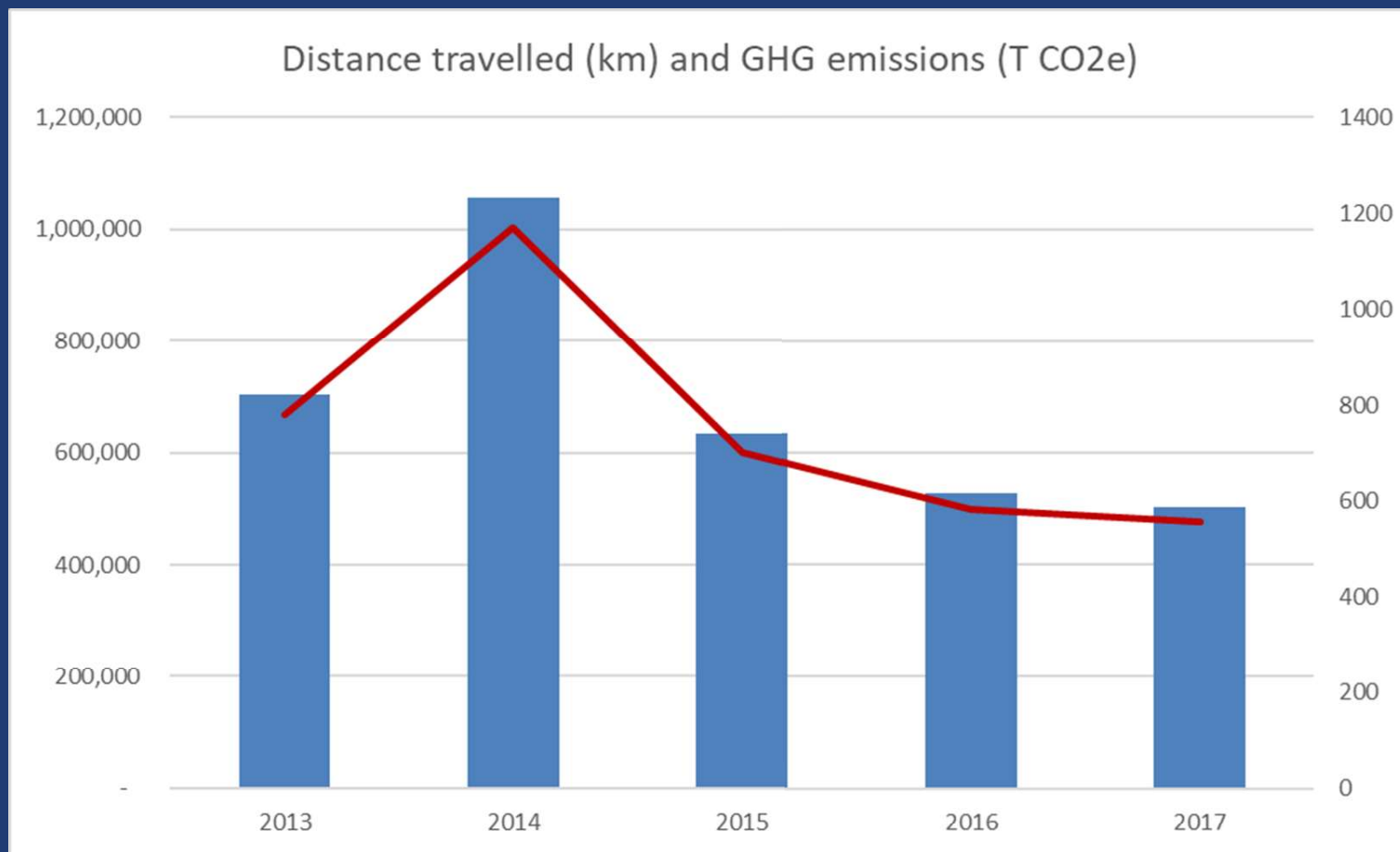
Case Study

Five years of data, calculated actual distances and compared to optimum distances; potential time savings/ transportation cost savings:

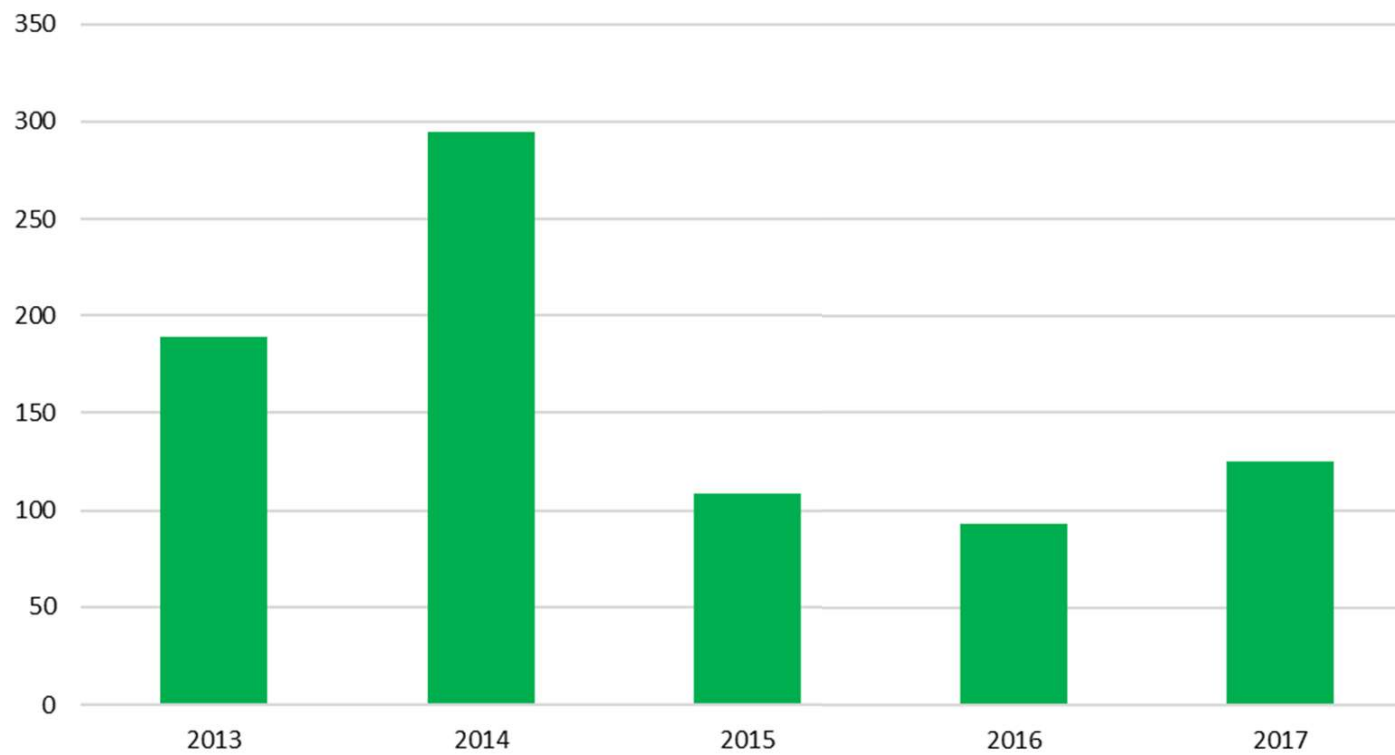
- More than 30,000 manifests
- \$190/hr. transportation cost
- 63% of the time – distance optimized : Opportunity = 37%
- More than \$900,000 potential savings : ROI > 300%

Potential Transportation Cost Savings (\$)





Potential GHG emission savings (T CO₂e)



Benefits



- ✓ Accessible anywhere
- ✓ Accurate and detailed information
- ✓ Enhances Safety
- ✓ Improves Regulatory Compliance
- ✓ Improves Communication
- ✓ Effortless ESG data gathering and analytics
- ✓ Cost effective compared to paper forms
- ✓ Makes lives easier



Value Proposition

IMMEDIATE AND SIGNIFICANT PAYOFF

- Enhances safety and compliance assurance
- Effortless ESG data gathering
- 90% reduction in time/effort
- Cost savings of \$20-\$40 per document



Key Takeaways

- Digital Shipping Documents are necessary to manage risks and enable Scope 3 GHG Emission Estimation
- Quick to implement with immediate cost savings
- Cost for not going digital is high!



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