

From Granular to Global: Visualizing Data, Driving Sustainability

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ERA
ENVIRONMENTAL

Management Solutions

How do you manage the **granular** data
while keeping the **global** picture in
mind?



What does Sustainability Mean for Automotive? It all starts with measuring!!!

People

- Environmental Justice
- Job Creation
- Health & Safety

Planet

- Landfill
- Water
- Energy
- Air Quality

Profit

- Business continuity
- Competition
- Doing More with Less

(E3 program)

Tom Murray



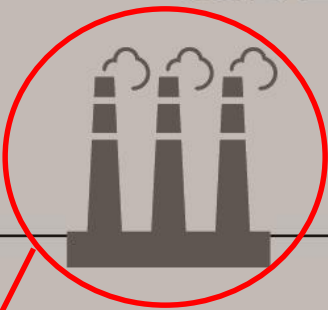
Where Does Sustainability Take Place?

SUPPLY CHAIN

Extraction



Tier II



Transport



Tier I

OEM



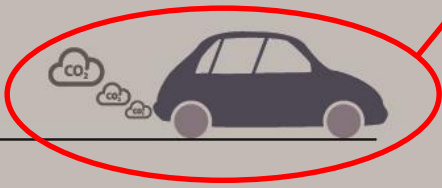
Paint Dept.



Fluid Fill



SCOPE 3



EPA CAFÉ Standards (2025)

Sustainability Examples

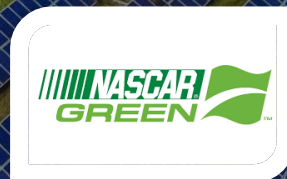
- G7 Alliance on Resource Efficiency (March 2016; US EPA); circular economy



TRI (Toxic Release Inventory) National Conference & PRTR Public Meeting (October 2016; USEPA & CEC)



- NASCAR Green (reaching out to fans for Sustainability ideas; looking outside the corporation/company)



From Granular...

- HOW WE DO IT: Env. Reporting and Sustainability tracking
- Environmental Database
- Relationship with Chemical Coating Vendors for a quarter century.
- GHS and SDS authoring at granular level (without doing more work)

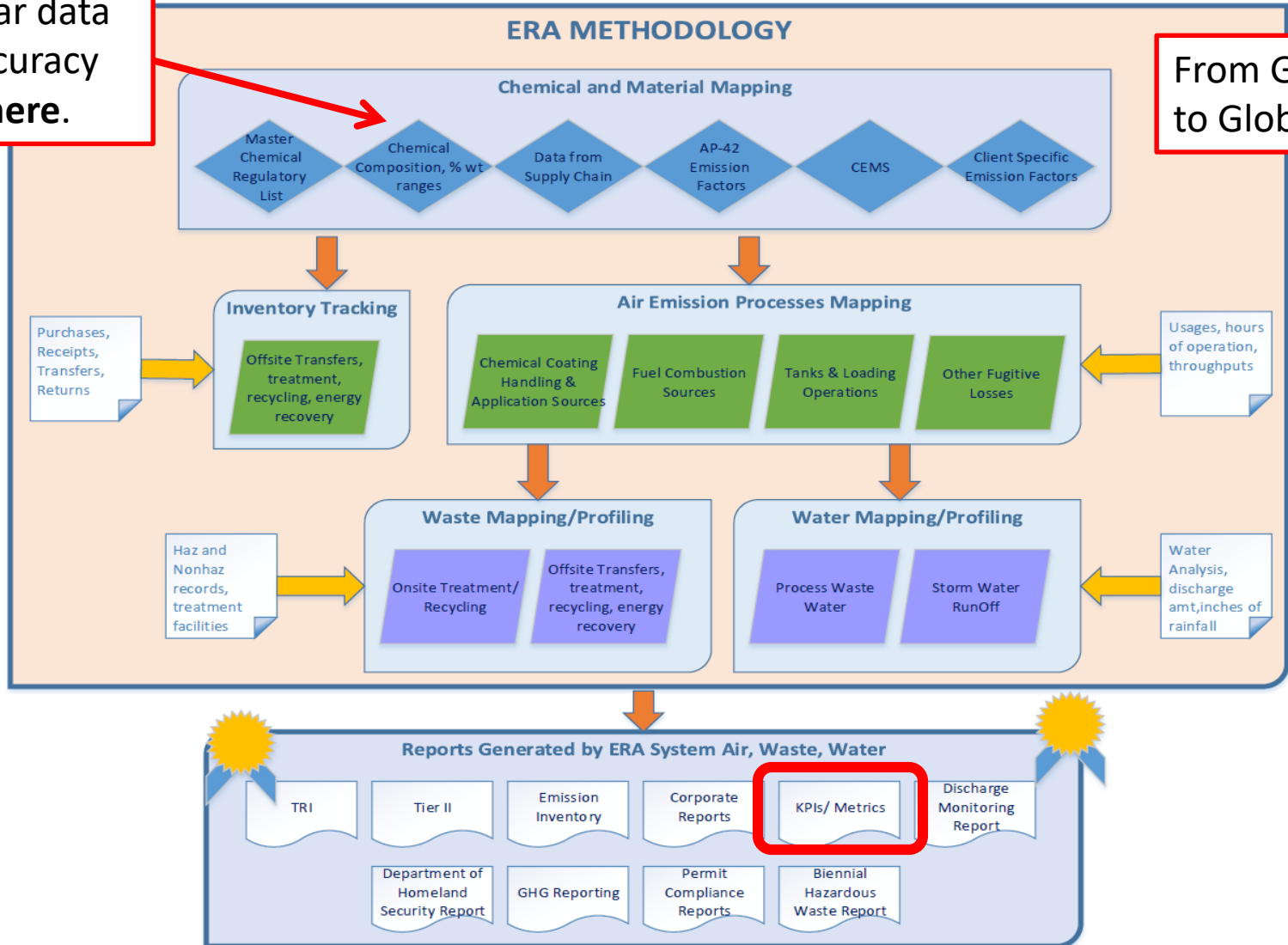


... to Global

- Pollution ignores borders.
- Macro view of all facilities and operations.
- Cooperation and communication between automotive OEMs (SP model).
- Global reporting (e.g., GRI, PRTR)

Granular data and accuracy starts **here**.

From Granular to Global



Sustainability Reporting on a Global Scale



HOW TO DELIVER:

- Data in Real Time Format
- KPIs
- Scope 3 Emissions (e.g., Customer usage)
- Unified Platform
- Standardization



Visualization

The background features a city skyline at sunset, with a network of white lines and nodes overlaid. Several circular icons are placed at nodes: a cloud, a smartphone, a car, a laptop, and a house. The overall color palette is a mix of blues, greens, and oranges from the sunset.

What's the solution to managing all of this big data?



- Quick links
- Environmental
 - Finishing & Chemical Coatings
 - Product Usage
 - Import Product Usage
 - Import Exceptions
 - Product Specifications
 - Vendor Import Product
 - Application Systems
 - Setup Wizard
 - Reports
 - Combustion
 - Fuel Usage
 - Import Fuel Usage Template
 - Emission Factors
 - Setup Wizard
 - Miscellaneous
 - Import Miscellaneous Usage Template
 - Product Specifications
 - Emission Factors
 - Setup Wizard
 - Miscellaneous Sources
 - Tanks
 - Tank Usages
 - Tank Usage Import Template
 - Product Specifications
 - Tanks
 - Setup Wizard
 - Universal Record Import
 - Usage Import Exceptions
 - Usage Import Errors

Erin's Recent reports

Facility:

Module:

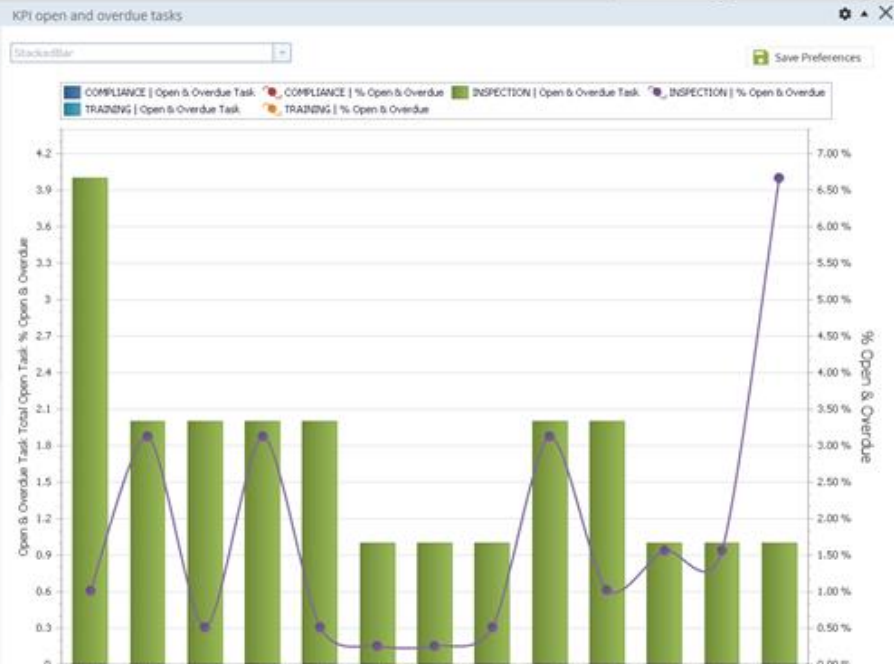
No data to display

Autogenerated Reports

Facility:

Module:

- Weekly Employee Update 2016-08-08
- Weekly Employee Update 2016-08-20
- Report Doc Man 2015-04-22

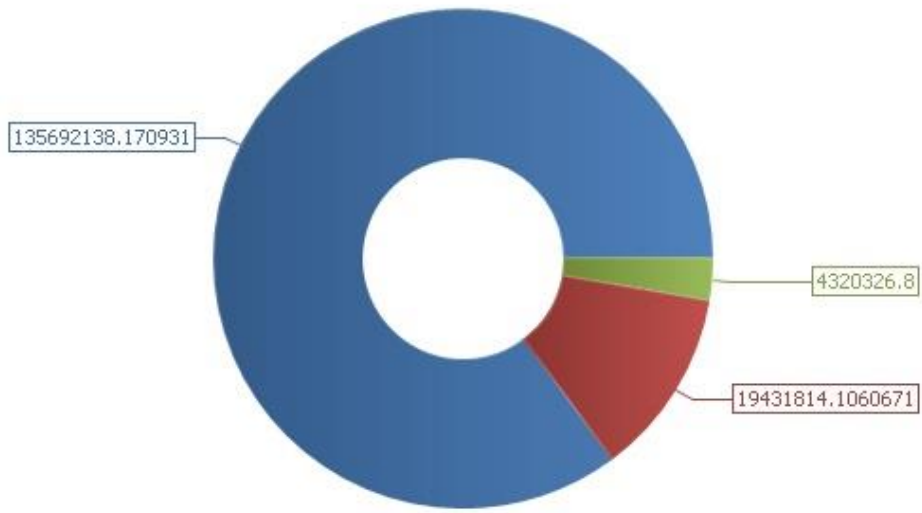


- Announce
- Software 12/08/2016
 - ERA Set 15 Partnershi 12/07/2016
 - ECO Chec 11/15/2016
 - Software 11/07/2016
 - Software 10/06/2016
 - ERA-EHS Septembe 10/03/2016
 - ERA-EHS 09/29/2016
 - ERA-EHS August 20 09/08/2016
 - ERA-EHS 2016 09/08/2016
 - ERA-EHS 2016 08/17/2016
- Page 1 of 3



CO2 METHANE NO2

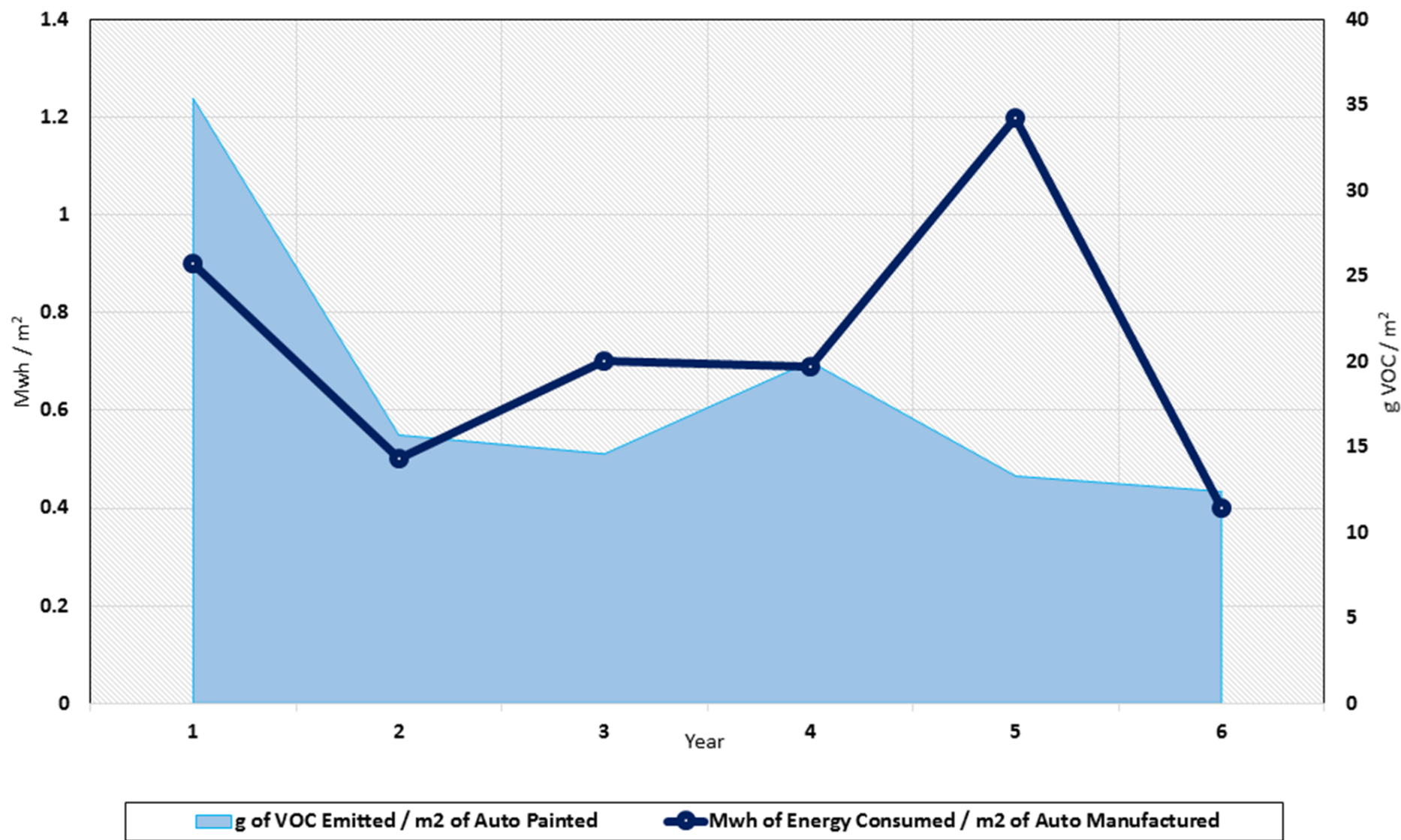
TotalEmissions Total (Sum)



FacilityID TRIProjectYear TRIID MoreThanOne TotalThroughput Used WaterUsed

TotalEmissions	
ChemicalName	
CO2	4320326.8
METHANE	19431814.1060671
NO2	135692138.170931
Grand Total (Sum)	159444279.0769981

Energy Used and VOCs Emitted per m² of Auto Manufactured



Where are We Heading?

Check the 2017 North American International Auto Show



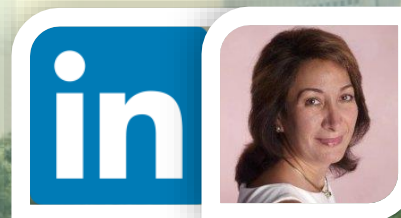
Questions?

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Thank you for attending this presentation.

Feel free to connect or reach out!