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# **JOURNEY INTO UNCHARTED TERRITORIES**

September 7-10, 2011

JW Marriott Desert Ridge, Phoenix, AZ

How are owners, contractors and suppliers adapting to successfully execute projects and reposition their businesses in the ever evolving project environment?



**REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES**



# **The Supply Game: Successfully Meeting Project Supply Needs in a World with Changing Boundaries**

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**MIKE  
McATEE**

**BASF Corporation**



Program Co-Chair

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**PLENARY SESSION 2**



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**REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES**

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## Enabling a Predictive Supply Chain

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**CRAIG  
REED**

**SVP – Supply Chain  
Management,  
Eaton Corporation**



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**PLENARY SESSION 2**



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**REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES**

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# Agenda

- Eaton
- Business Challenges
- Business/Supply Chain Continuity
- Sustainability

# Eaton - A Leader Across the Power Management Spectrum

**Mission:** To provide safe, reliable, efficient and sustainable power management solutions for our global customers.



**Cities & Buildings**



**Industrial & Machinery**



**Information Technology**



**Transportation**



**Infrastructure**



**Energy & Utilities**

- Founded in 1911 by J.O. Eaton
- Regional Headquarters in Shanghai, China; Morges, Switzerland; Sao Paulo, Brazil
- Innovation Centers in the USA, China and India
- Customers in more than 150 countries
- 2010 sales of \$13.7 billion, 55% of sales outside the U.S.
- Approx. 70,000 employees

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# Electrical Sector - A Leader in Electric Power Solutions

## Power Distribution



- Circuit breakers
- Switchgear
- Panelboards and switchboards
- Transformers
- Assemblies

## Power Quality



- Uninterruptible power supplies
  - Single phase
  - 3 phase
- Power distribution units
- Meters and software

## Control and Automation



- Drives
- Sensors
- Human machine interface
- Control components

## Services and Aftermarket



- Engineering and consulting services
- Turnkey design, build and management
- Maintenance and aftermarket
- Power audits and studies

# Industrial Sector - A Leader in Mechanical & Fluid Power

## Aerospace



- Hydraulic Systems
- Conveyance Systems
- Electrical, Sensing and Controls
- Fuel Systems

## Hydraulics



- Controls
- Fluid Conveyance
- Power
- Filtration Systems

## Oil and Gas



- Integrated Hydraulic Systems
- Integrated Power Systems
- Filtration Systems
- SubSea Umbilicals
- Control Systems

## Vehicle



- Valvetrain
- Supercharger
- Torque Control
- Fluid Connectors
- Fuel and Powertrain
- Clutch
- Hybrid



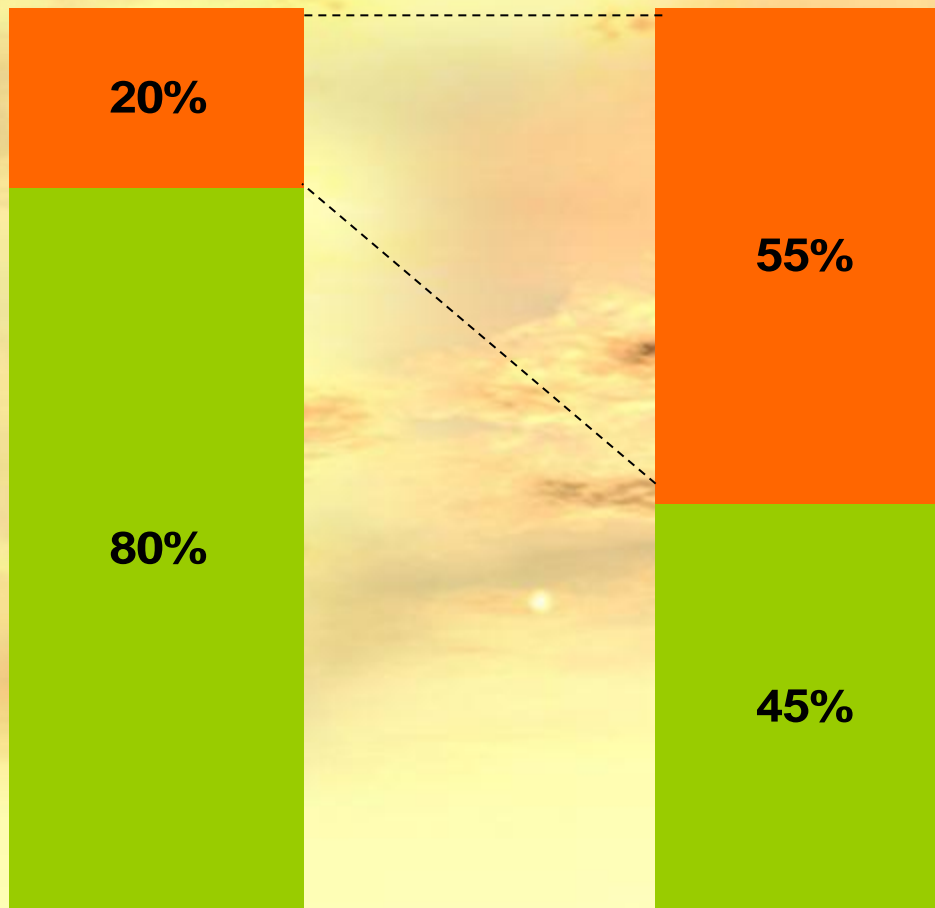
# Business Challenges

- **Increased Customer Expectations**
  - Delivery, Quality, Service & Cost
  - Predictability, Innovation, Speed & Sustainability
- **Regulations**
  - Trade & Environmental – by Country
- **Globalization**
  - Increased Volatility
  - Length of Supply Chains
  - Geopolitical Environment



# Manufacturing Regionalization - Sales by Region

■ U.S. ■ International



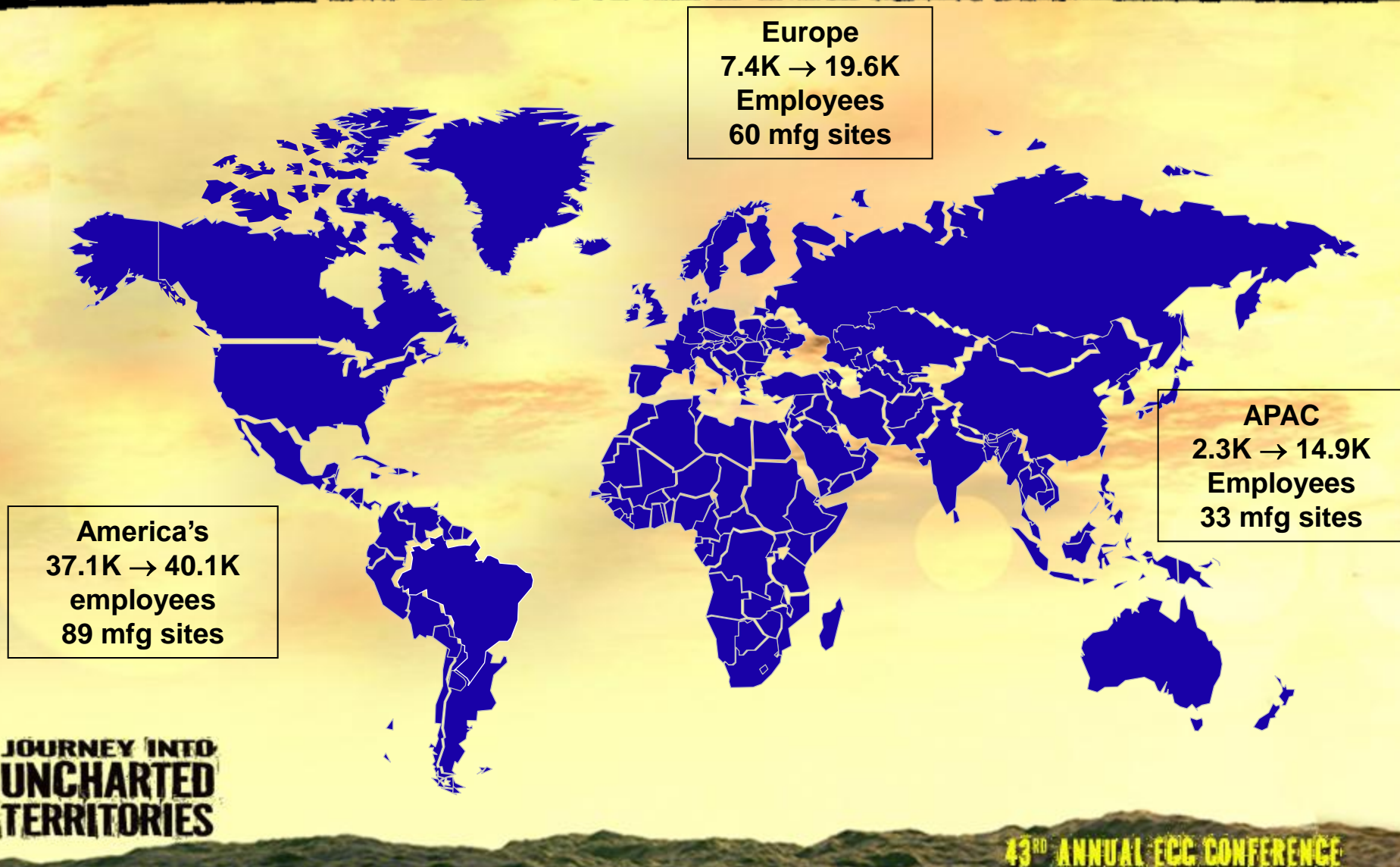
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2000

2010

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# Manufacturing Regionalization - # of Employees (2002 - 2011)





# Enterprise Risk Management

**Regulatory Risk**

**Business Risk**



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# Enterprise Risk Management Elements

- Starts with CEO & Board
- Enterprise Risk Management Team
  - Regionalization
  - Business Continuity
  - Supply Chain Continuity
  - Sustainability
- Changing Roles & Responsibilities
- Global Learning, Sharing, and Alignment



# Business Continuity



Warwick, Rhode Island

- **Event Summary**
  - March 31, 2010
  - Record 500-year flood hits Rhode Island yielding unprecedented disaster
  - Warwick Plant under 4 feet of water and no power
  - \$38M property damage

# Business Continuity

## Protection of assets via a systematic process

### RISK

- Customer Impact - Delivery, Quality & Cost Predictability
- Manufacturing
  - Employee safety
  - Equipment condition
  - Supply chain continuity
  - Natural disaster
    - Floods, hurricanes, etc.

### MITIGATION

- Business Continuity Teams
- Mfg. Site Risk Assessments
  - Customer recovery req.
  - Equipment, suppliers & people resource backup
  - IT recovery
- Plant Recovery Strategy/Plan



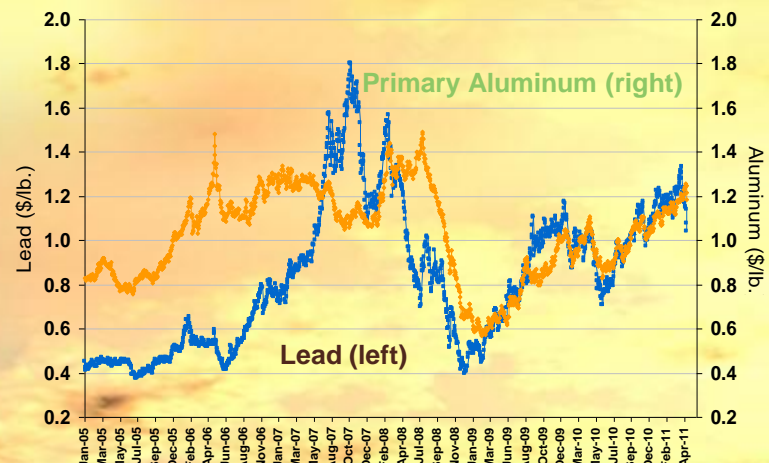
# Global Commodity Pricing

## Copper and Nickel



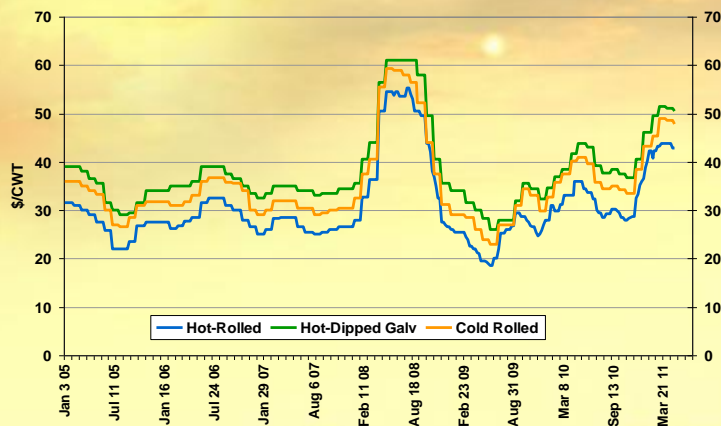
Source: London Metal Exchange  
Daily data through May 6, 2011

## Aluminum and Lead



Source: London Metal Exchange  
Daily data through May 6, 2011

## North America Steel Prices



Source: Steel Business Briefing  
Weekly data through May 2, 2011

# Supply Chain Continuity

## Supply Chain process to ensure predictable material flow

### RISK

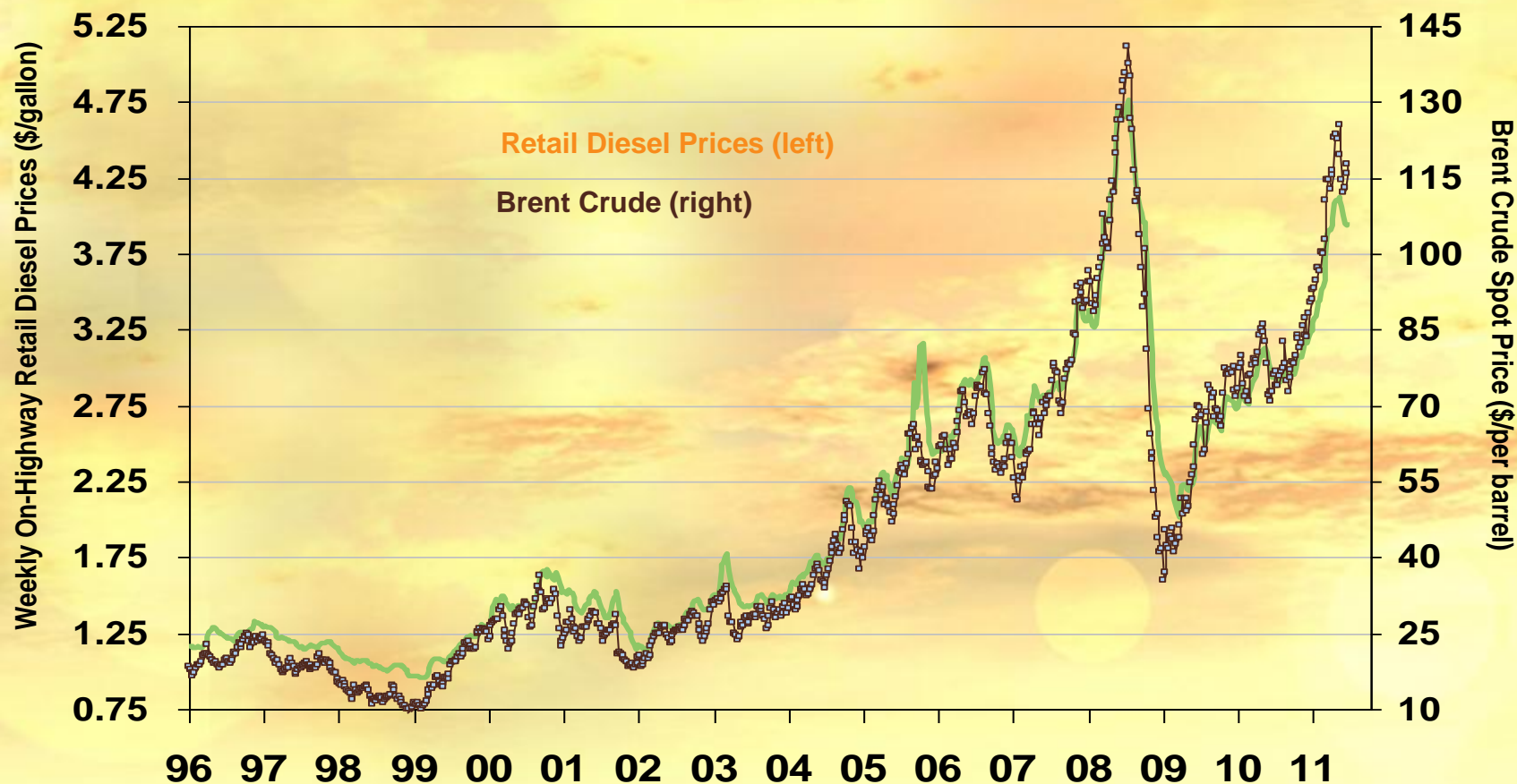
- **Consistent Performance**
  - Delivery
  - Quality
- **Commodity**
  - Raw material
  - Qualification lead times
- **Financial**
  - Solvency/Cash flow
- **Region**
  - Lack of standards
  - Political/Economic

### MITIGATION

- **ProLaunch**
- **Sourcing Strategy**
  - Dual source
  - Global sourcing
  - Localization
- **Financial Health Monitoring**
- **Commodity and Currency Hedging**
- **Assessments**
  - Financial, Quality, Sustainability
  - Contingency planning



# Global Oil and Diesel Fuel Prices



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Source: U.S. DOE, Energy Information Agency  
Weekly data through June 13, 2011

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# Logistics

## Management of transportation & distribution of materials

### RISK

- Long, Complex Supply Chains with More Hand-Offs and Hubs
  - Variable product delivery
  - Congestion & scheduling
  - Cargo security & theft
- Government Legislation
  - Environmental & security

### MITIGATION

- Manufacturing
  - Regionalization
  - Flexible Manufacturing
  - EMEA, APAC, America's
- SCM
  - Increased SIOP velocity
  - Consignment inventory
  - Strategic use of 3PL
  - Increased visibility to customer
  - CTPAT certified



# Trade Management

**Compliance with export laws i.e., documentation, duties, taxes & technology controls**

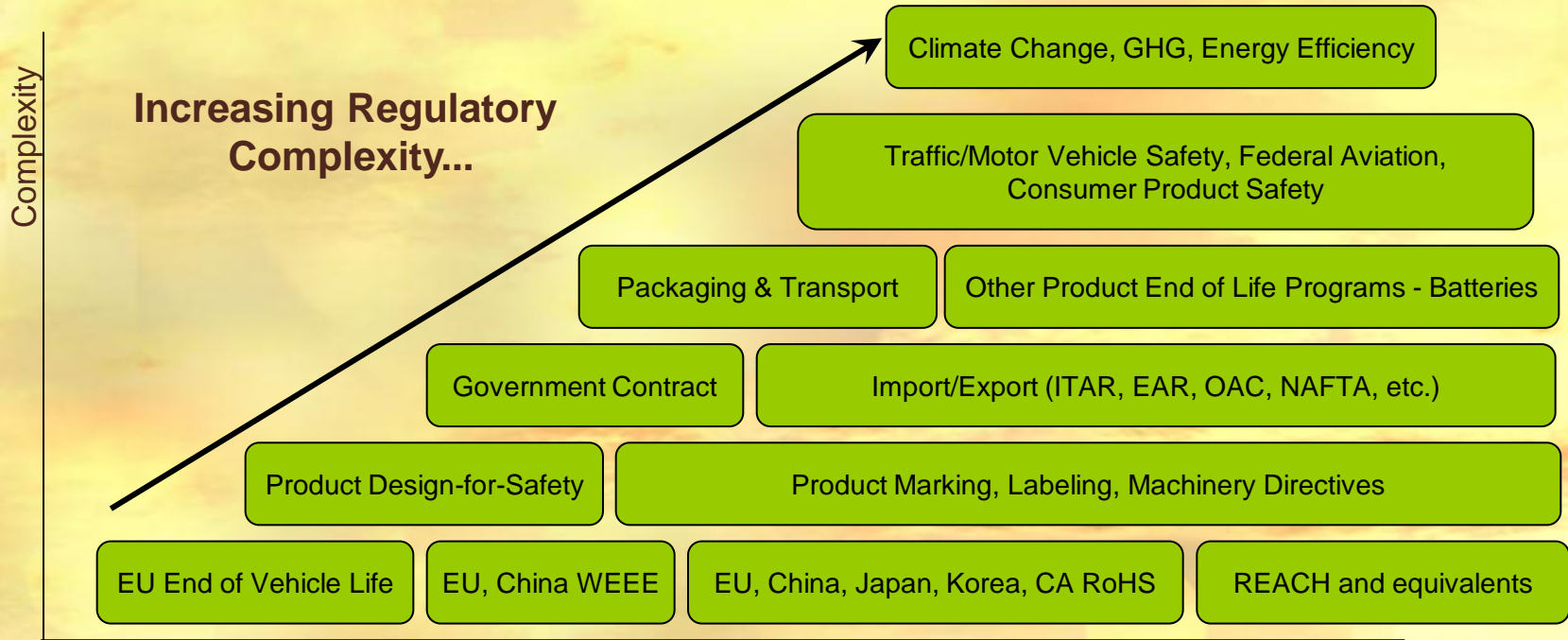
## **RISK**

- **Rapidly Changing Regulatory Landscape**
  - More country export laws
  - Unnecessary Duties/Taxes
  - Fines/Penalties
  - Clearance Delays
  - Seizure of Goods
  - Loss of Import/Export Privileges
  - Audits/Investigations/Litigation

## **MITIGATION**

- **Focus - Organizational Excellence**
  - Regionalization
  - Functional experts
  - Strategic use of 3<sup>rd</sup> parties
- **Standards**
  - Enterprise-wide policies and procedures
  - Routine assessments
- **Technology**
  - ERP controls – product/country

# Sustainability



**The task of getting and staying compliant is increasingly complex**

**Number of Regulations is Exploding**



# Sustainability

Meeting of today's world needs in ways that protect tomorrow

## RISK

- Customer Requirements
- Regulatory Requirements
- Social Requirements

## MITIGATION

- Internal
  - Global Code of Ethics
  - Global site MESH assessments
  - Global Energy/GHG, waste, water reduction goals
  - Metals, packaging, & chemical recycling programs
- External
  - Supplier Code of Conduct
  - Assessments - financial, quality, environmental
  - Carbon Disclosure Plan

# The Eaton Business System (EBS) is How We Work/Learn at Eaton

The Eaton Business System (EBS) is the embodiment of our Integrated Operating Company philosophy.

- It is based on our belief in standard processes and a teachable point of view
- It ensures that we transfer best practices and key learning across the organization
- It encourages continuous improvement

EBS enables us to:

- Respond quickly to customer needs
- Deliver more cost-effective solutions
- Keep customers and businesses on the leading edge of change





# Enterprise Risk Management Elements

**Regulatory Risk**

**Business Risk**



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