

Demystifying sustainability risk

GMA/FMI Sustainability Summit

15 August, 2013

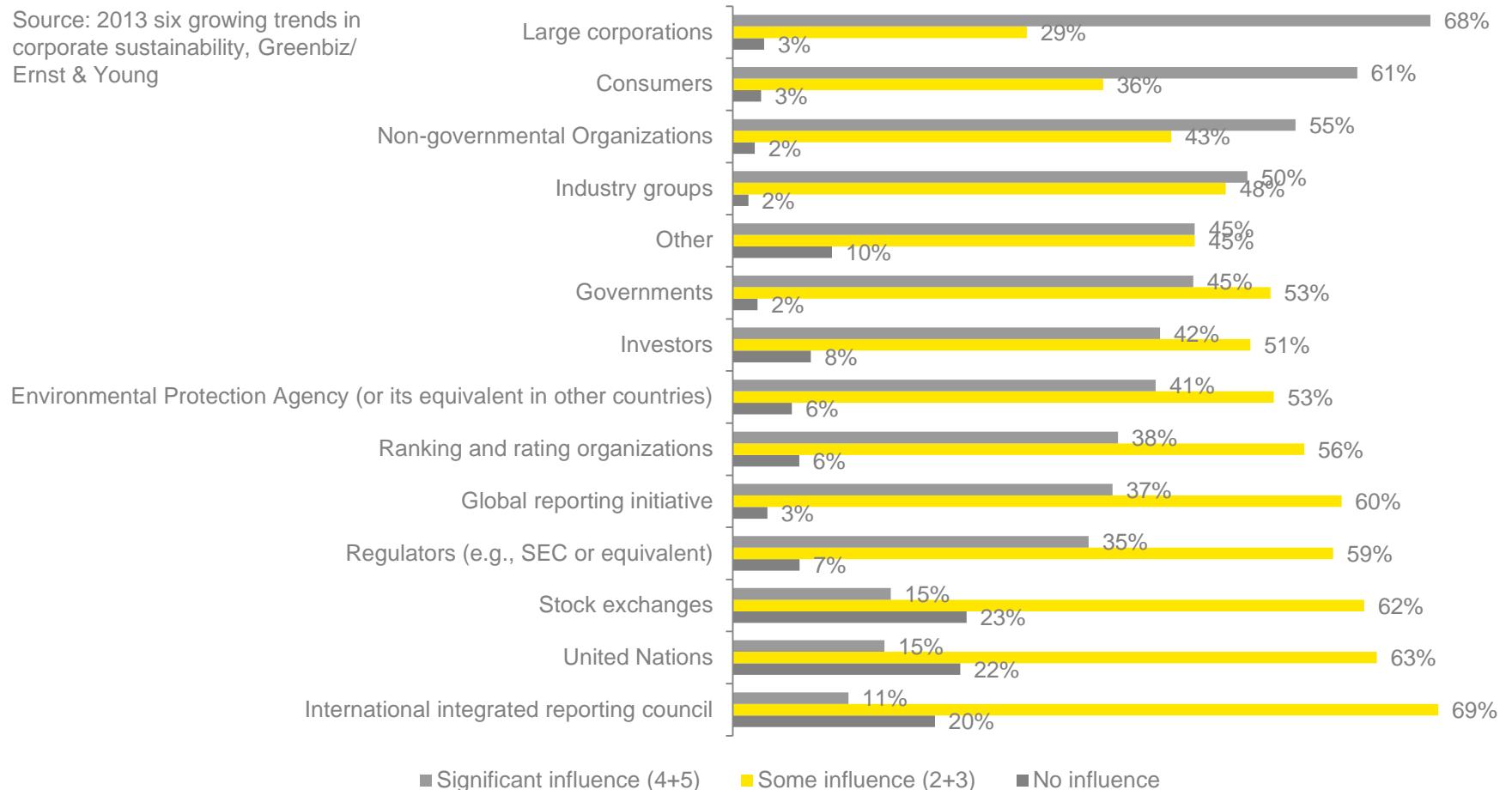


Building a better
working world

Corporations see themselves as having the greatest role in advancing a global sustainability agenda

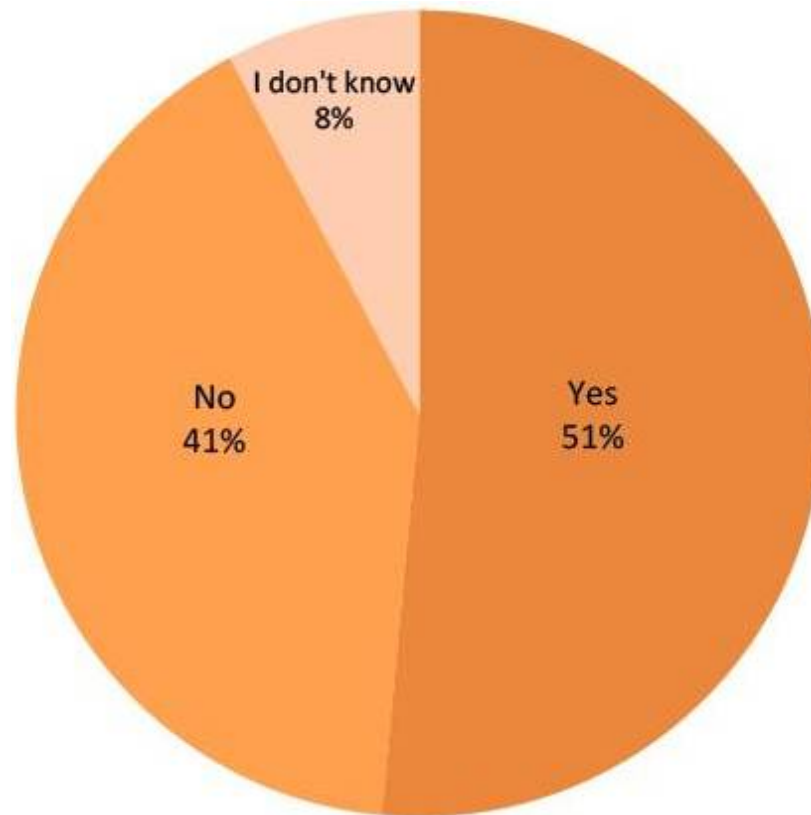
Which groups have a positive impact on advancing sustainability on a global basis?

Source: 2013 six growing trends in corporate sustainability, Greenbiz/Ernst & Young



Heightened risk and proximity of natural resource shortage

Do you anticipate your company's core business objectives to be affected by natural resource shortages (e.g., water, energy, forest products, rare earth minerals/metals) in the next three to five years?

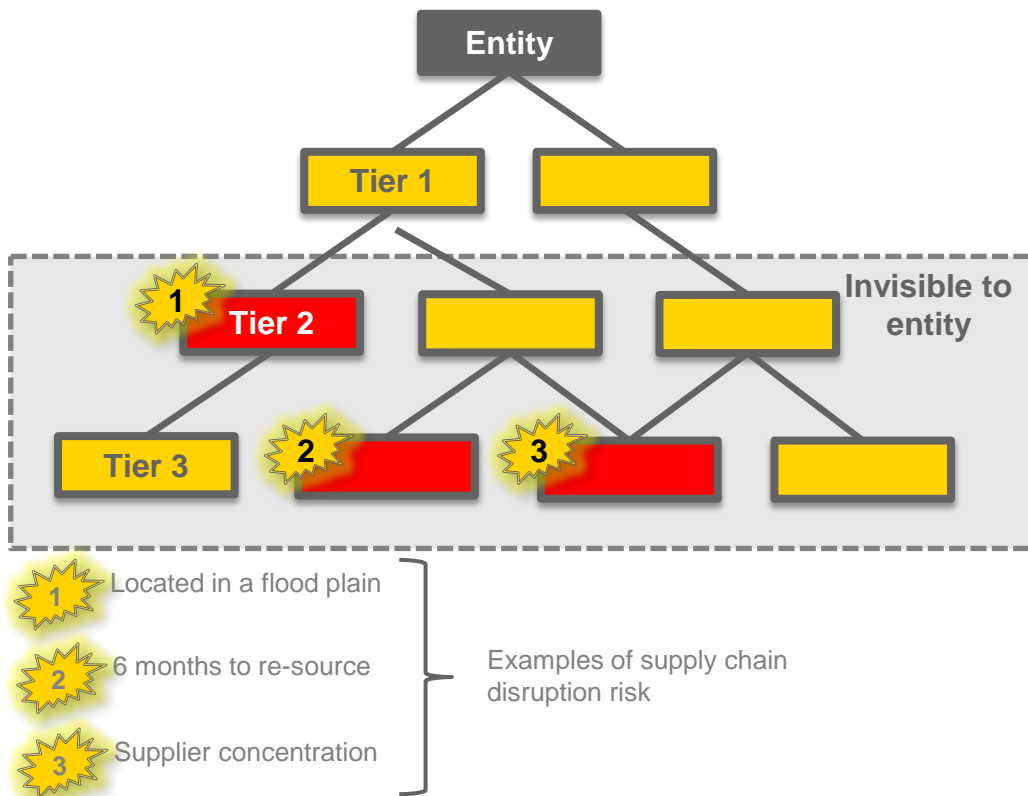


Source: 2013 six growing trends in corporate sustainability, Greenbiz/Ernst & Young

Supply Chain incidents are commonplace and damaging but the risks are often unknown

"Last year 73% of firms experienced supply chain disruption with 1 in 5 of these suffering a loss of more than 1 million Euros."*

Source: * 4th annual supply chain resilience survey 2012 – an international survey of 530 organisations in over 65 countries



"Today in the UK [food supply chains] have become so complex that the retailer or the manufacturer doesn't know where the product's coming from... It doesn't need to be complicated and we need to bring it back to its simplest terms. When you introduce complexity, you introduce risk."

Dalton Philips, Chief Executive of Morrisons speaking to the BBC, February 2013

What can go wrong?

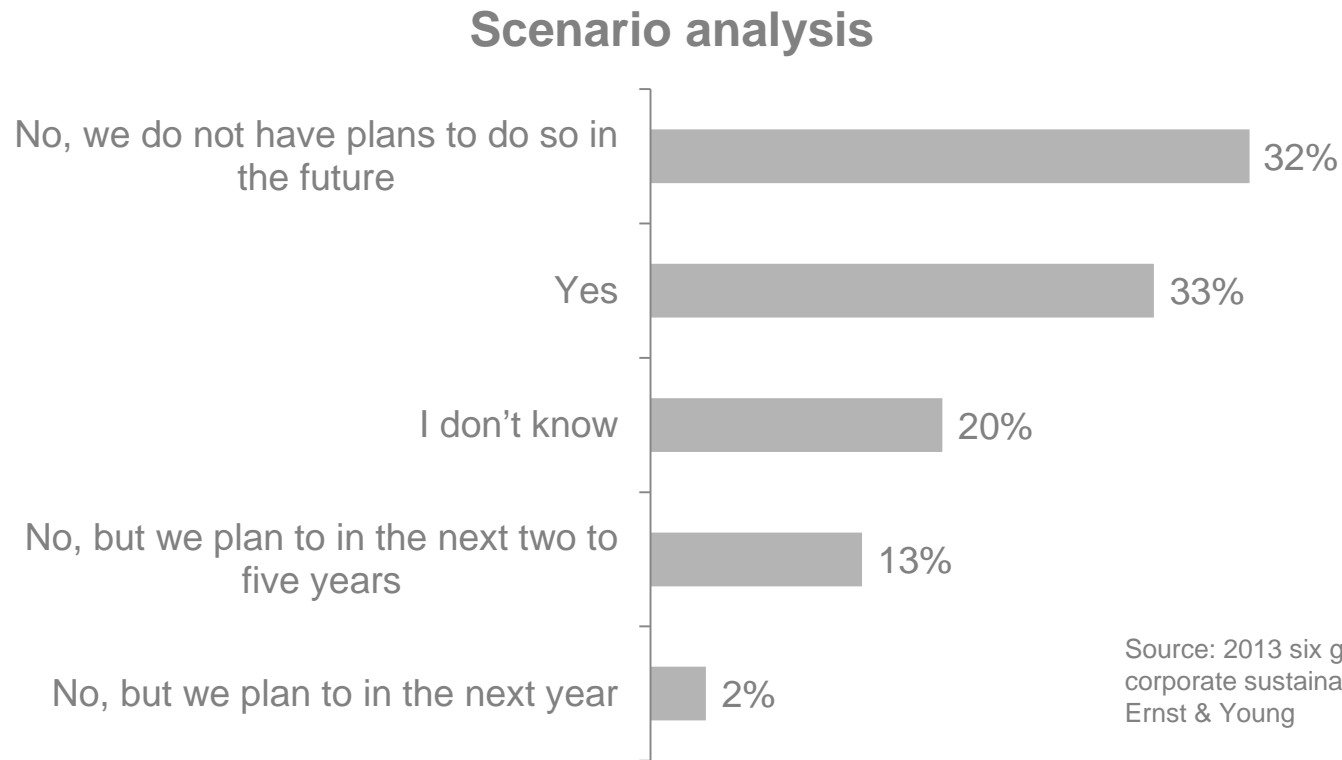
Catastrophic accidental supplier failure	<p>20 April to 19 September 2010: BP suppliers Transocean, Halliburton and Cameron International</p> <ul style="list-style-type: none"> ▶ BP budget of \$37.2 billion for spill-related expenses. ▶ BP agreed to plead guilty to deaths of the 11 workers , paid a \$4B fine. ▶ Transocean agreed to pay the US Govt. \$1.4 billion in civil and criminal fines and penalties.
Catastrophic natural disaster – global supply effects	<p>11 March 2011: Earthquake and tsunami causing Fukushima nuclear plant leakage</p> <ul style="list-style-type: none"> ▶ Japan is the world's largest supplier of silicon used to make semiconductor chips—at about 60% of the global total. Japanese suppliers also accounted for +20 %of global semiconductor production in 2010. ▶ Knock-on effects on automotive and electronics manufacturers globally, e.g. Toyota -500,000 cars vs. plan
Fraud or criminal action in the supply chain	<p>January to April 2013: Horsemeat scandal affecting supermarkets, food producers and caterers</p> <ul style="list-style-type: none"> ▶ Product recalls after horse DNA was discovered in beef products initially in Ireland and then across Europe. ▶ UK Government review announced to assess integrity and assurance of food supply networks. ▶ Analysts believe the scandal hit Tesco worse than many of its peers – underlying sales down 1% for Q1.
Supplier social responsibility and ethical behaviour	<p>24 April 2013: Bangladesh Rana Plaza garment factory collapse , killing more than 1,000</p> <ul style="list-style-type: none"> ▶ 4 million people work in garment factories in Bangladesh; 60% of factories believed to be unsafe; 18 garment factories shut down for safety reasons. ▶ Firms using Dhaka suppliers include Primark, Matalan, Mango, Benetton and others.

Scenario planning is becoming a sustainability imperative

- ▶ The recent acceptance that a minimum of 2 degree centigrade temperature increase by 2050 is now locked into the climate system has hastened the imperative of scenario mapping.
- ▶ Additionally, the growing interconnectedness of global environmental and social risks such as water, climate, food shortages and resource nationalism require a scenario-based approach that attempts to anticipate key 'tipping points' in global environmental systems.

Yet, scenario analysis is not utilized by many corporations

Has your organization run scenario analyses considering the availability of key inputs such as water or other raw materials, access to arable land, or population shifts?



Source: 2013 six growing trends in corporate sustainability, Greenbiz/Ernst & Young

Question 1

Do you think there is a disconnect between the proximity of the risks posed by global environmental decline and the seriousness with which this is taken within corporate risk functions?

Managing sustainability risks in the supply chain has several positive potential business impacts

		Sustainability Factors					
		Environmental		Social		Ethical/Governance	
		Pollution reduction & resource efficiency	Biodiversity protection & restoration	Labour rights & working conditions improvement	Local community development	Anti-corruption	Fair competition & taxation
Business Success Factors	Pricing power						
	Cost Savings & Productivity						
	Reputation & access to talent						
	Market access & market share						
	Access to finance & reduced risk premiums						

- Very high impact
- High impact
- impact
- No impact

*Analysis based on observations

Benefits

Safeguarding reputation

- ▶ e.g. less negative NGO and media interest and exposure, better access to talent

Lowering cost

- ▶ e.g. lower taxes, fewer compliance related supply disruptions

Creating revenue opportunities

- ▶ e.g. increased market access, sales of surplus emission rights

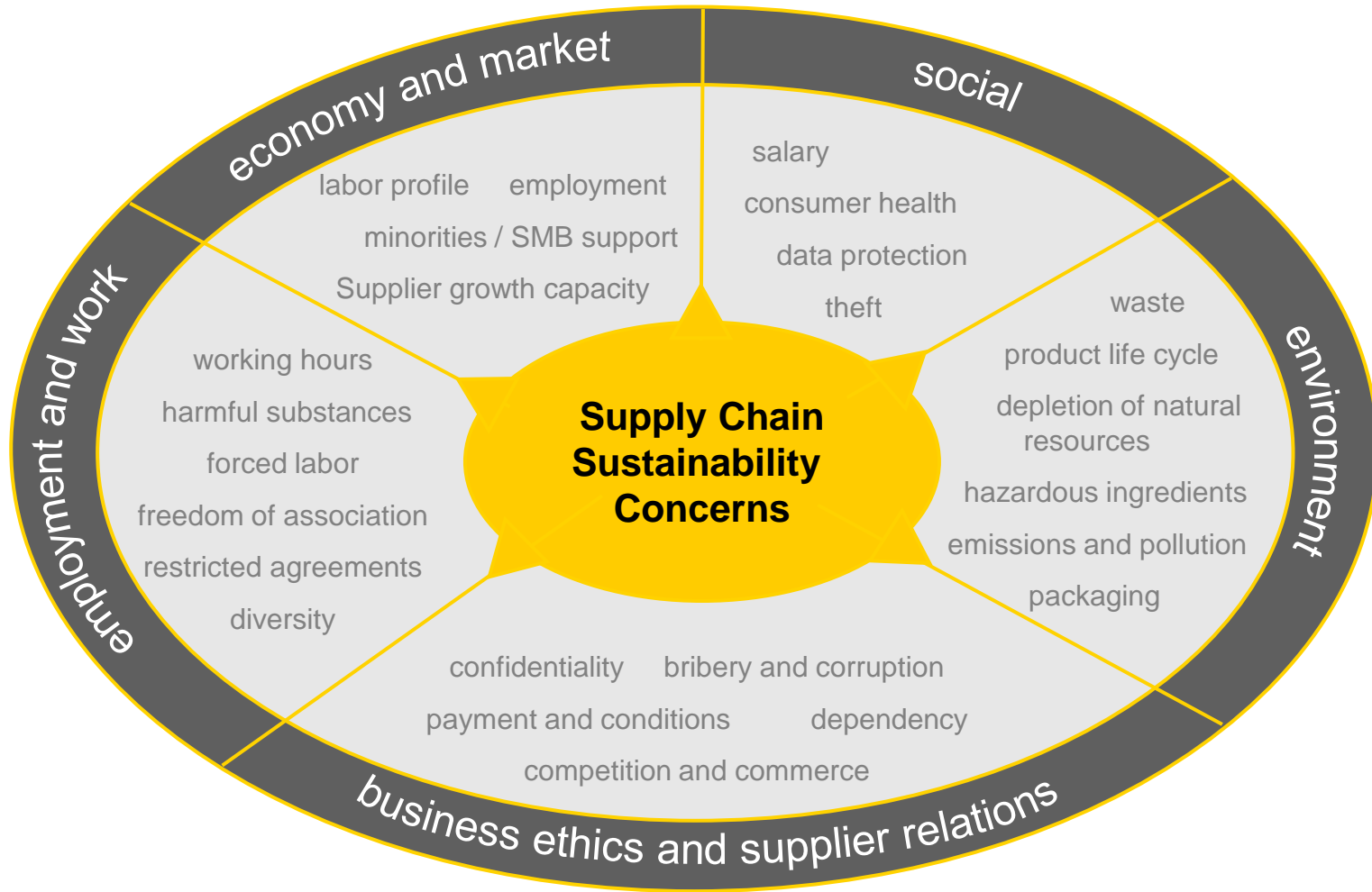
More favorable financing

- ▶ e.g. increased access to finance, reduced risk premium (lower interest rates)

Question 2

To what extent do you think the current pressure of corporate sustainability initiatives to show an almost immediate ROI is undermining our ability to address the more systemic organizational sustainability risks and short changing benefits such as longer term cost avoidance, value creation and large scale climate change mitigation?

There are typically multiple sustainability related risks in the average supply chain



Question 3

Assuming that one barrier to the appropriate quantification and elevation of sustainability risks within corporate risk registers is data, to what extent do you see there as being sufficient external data available to allow companies to assess their exposure to sustainability risks within their supply chain?

Question 4

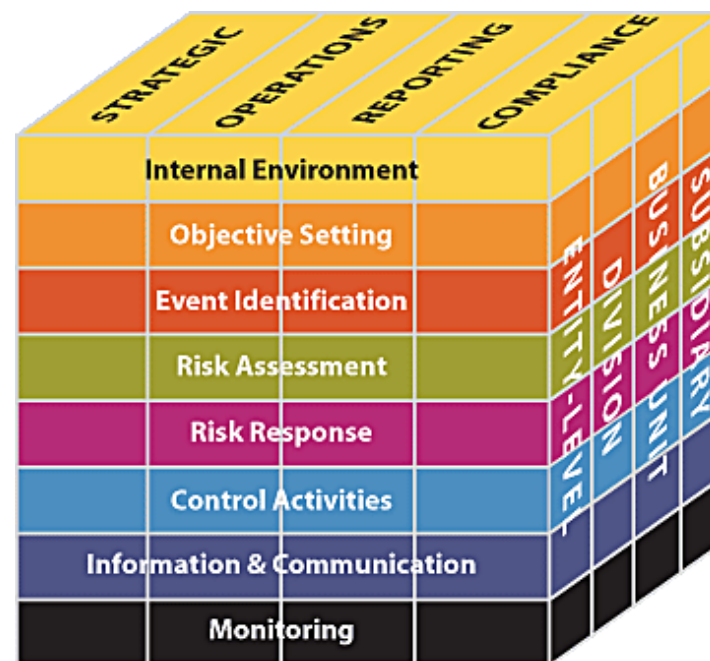
Once companies have a handle on their own resource data what do you see companies needing to do to wrap their hands around their inter-relationships with sustainability risks to the extent that they can feed it into a corporate ERM framework ?

Sustainability and COSO

Integrating sustainability into the components of the COSO ERM Framework

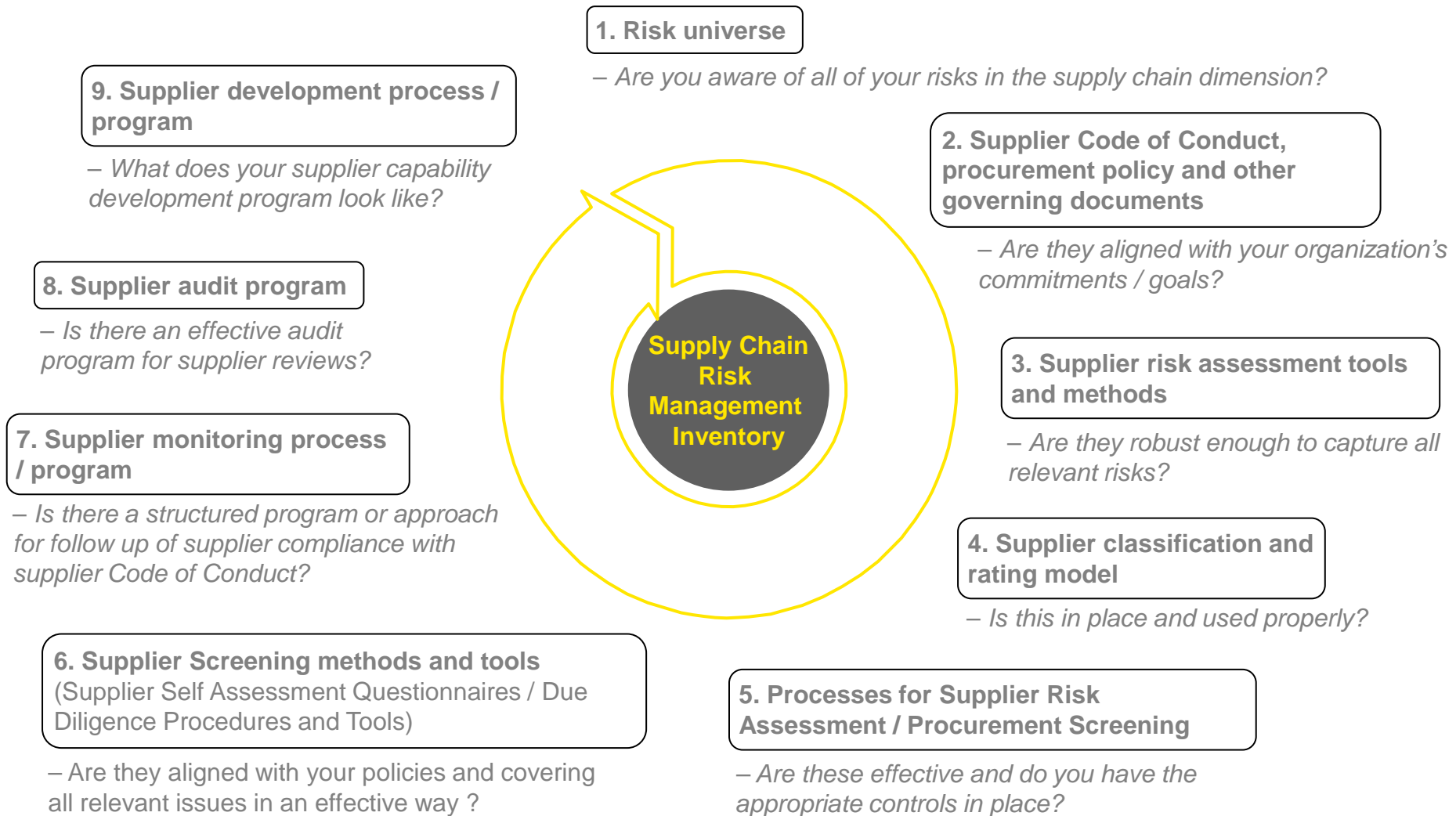
► Eight components

- **Internal environment** – Establishes the organization's risk culture and risk management
- **Objective setting** – Forms the risk appetite of the organization
- **Event identification** – Identifies incidents that could affect the organization's strategy
- **Risk assessment** – Determines the extent to which potential events might impact objectives
- **Risk response** – Identifies and evaluates risk responses
- **Control activities** – Policies and procedures
- **Information and communication** – Communication information required to carry out responsibilities
- **Monitoring** – Monitor and evaluate activities to ensure the organization is achieving its objectives



Source: COSO: Demystifying Sustainability Risk, by Ernst & Young 2013

Things you may want to inventory to make sure your risk management is in line with you risk appetite and strategy



Question 5

How is investor awareness of sustainability risk driving demand for ESG information in the marketplace?

An increasing pressure from investors and regulators for transparency to mitigate risk

New expectations from society

THE TIMES
Foxconn admits putting children aged 14
on production lines



New international guidelines for more transparency

Global Reporting Initiative GRI3 & 3.1



Indicators related to the respect of Human Rights in suppliers and sub contractors selection process

New guidelines in the GRI 4 (expected in May 2013)

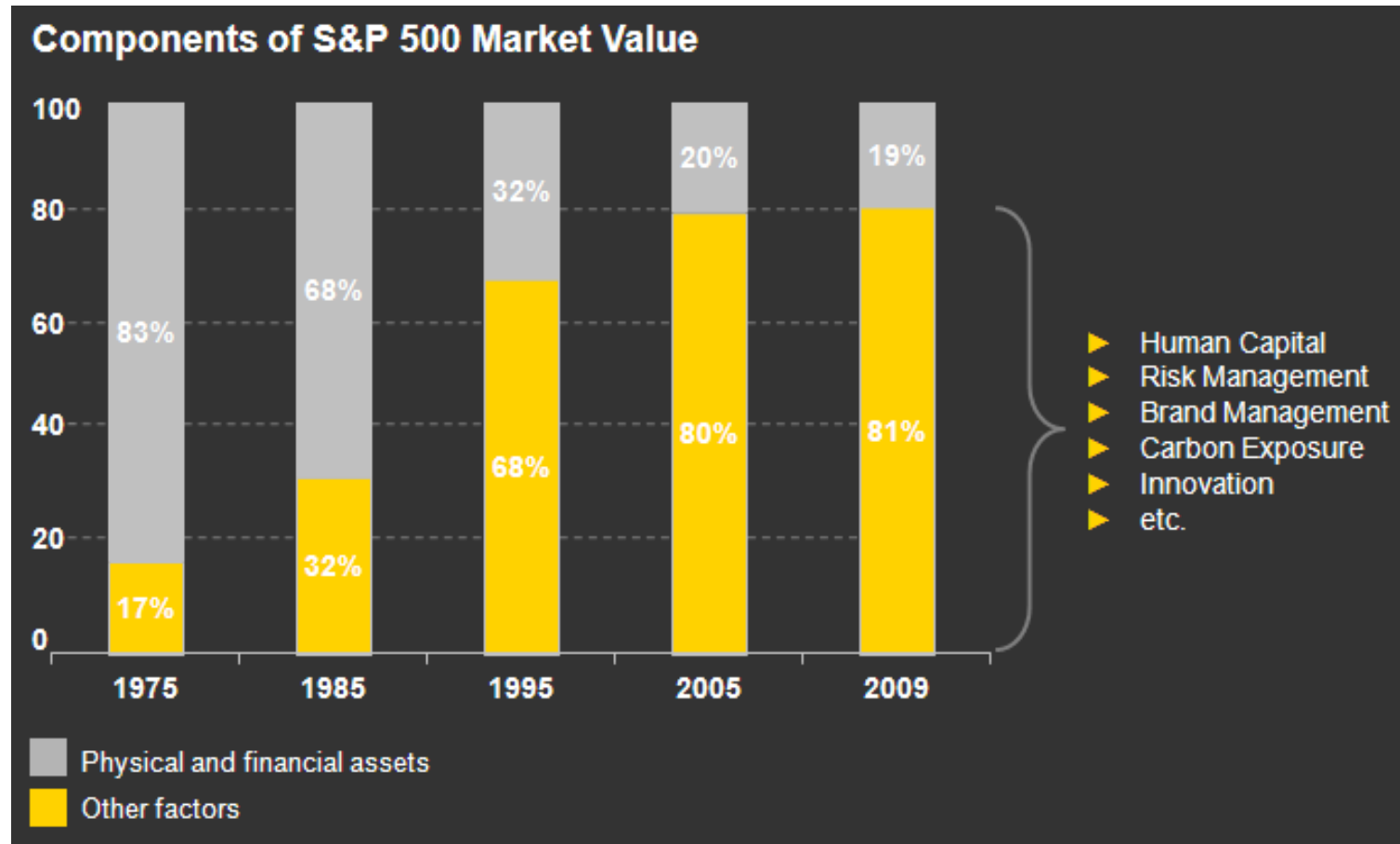
- ▶ Spending on locally owned suppliers
- ▶ Average time to pay supplier
- ▶ Spending on « certified » or « labelled » products
- ▶ Selection of suppliers based on economic, social and environmental criteria
- ▶ Suppliers assessments on social and environmental criteria
- ▶ Social and environmental performances of suppliers

▶ Integrated Reporting (IIRC Guidelines framework)

- ▶ Suppliers considered as a key stakeholder to create and preserve value

INTEGRATED REPORTING <IR>

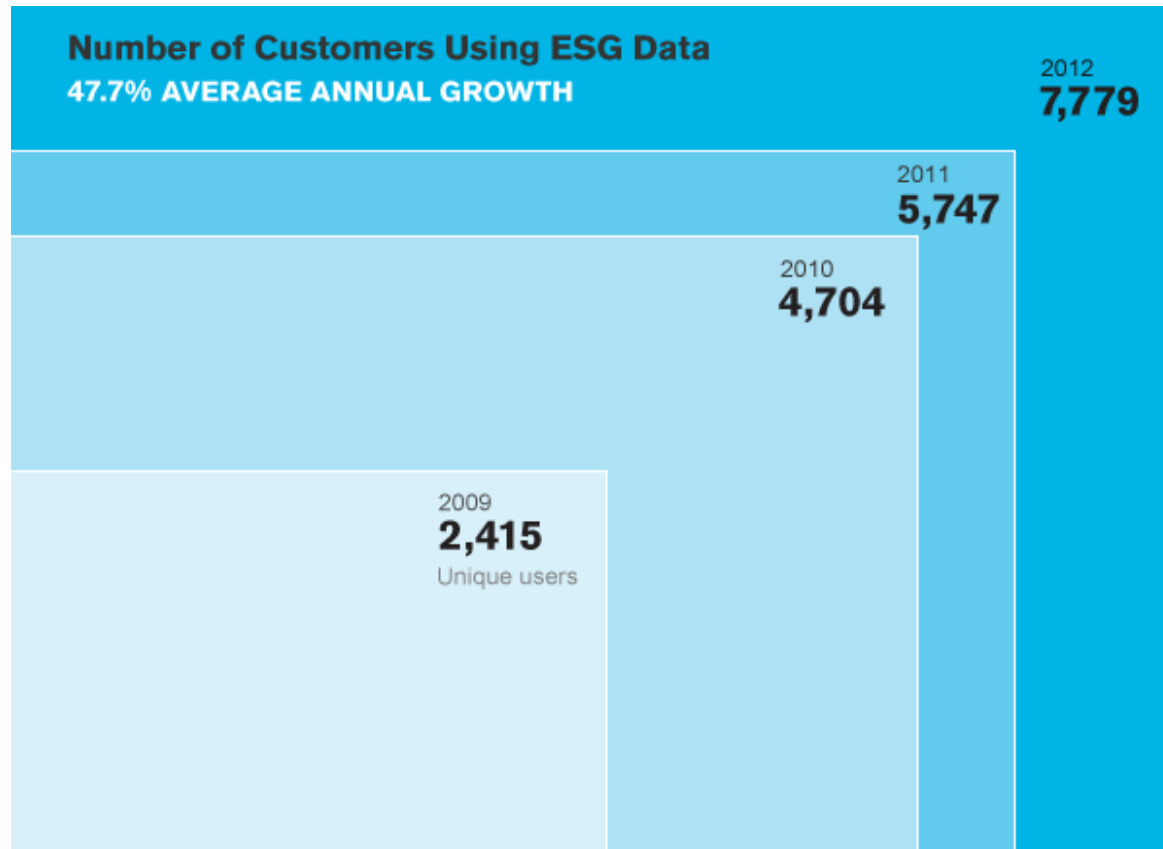
Increasing importance of intangible assets



Source: Ocean Tomo (2010), "Ocean Tomo's Intangible Asset Market Value Study"

Growing use of ESG data by investors

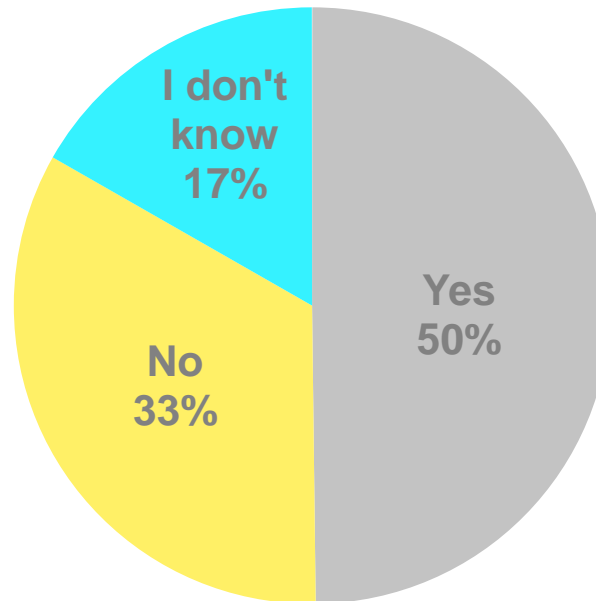
More customers using Bloomberg ESG Data



Bloomberg collects ESG data from published company material and integrates it into the Bloomberg Equities and Industries services.

Companies see an increase in inquires from investors / shareholders

Has your company seen an increase in inquiries from investors/shareholders about sustainability-related issues in the past 12 months?



Source: 2013 six growing trends in corporate sustainability, Greenbiz/Ernst & Young

Examples of international standards and guidelines relevant to sustainable supply chain management

Guidelines, frameworks and conventions e.g.:

- ▶ Dodd Frank Section 1502 -Conflict Minerals
- ▶ Global Compact
- ▶ ISO 26000
- ▶ OECD-Guidelines
- ▶ ICC-Charter
- ▶ Ethical Trading Initiative
- ▶ China Social Compliance 9000 for the Textile and Apparel Industry (CSC 9000 T)
- ▶ Ecological Footprint Standard
- ▶ SEDEX - Supplier Ethical Data Exchange
- ▶ ICFTU/ITS Basic Code of Labor Practice
- ▶ ICS - Initiative Clause Social

Certification Standards, e.g.:

- ▶ SA 8000
- ▶ ISO 14001
- ▶ OHSAS 18001

Seal of quality, e.g.:

- ▶ Fair Trade
- ▶ Rugmark
- ▶ FSC

Business solutions, e.g.:

- ▶ FLA (Fair Labor Association)
- ▶ BSCI (Business Social Compliance Initiative)
- ▶ EICC (Electronic Industry Code of Conduct)
- ▶ WRAP Principles (Apparel Certification Program Principles)
- ▶ ICTI CARE Process (International Toy Industry's Ethical Manufacturing Programs)

And more...

Question 6

Are current supplier audit programs addressing sustainability risk appropriately?



What usually goes wrong with audits, according to the ETI ?

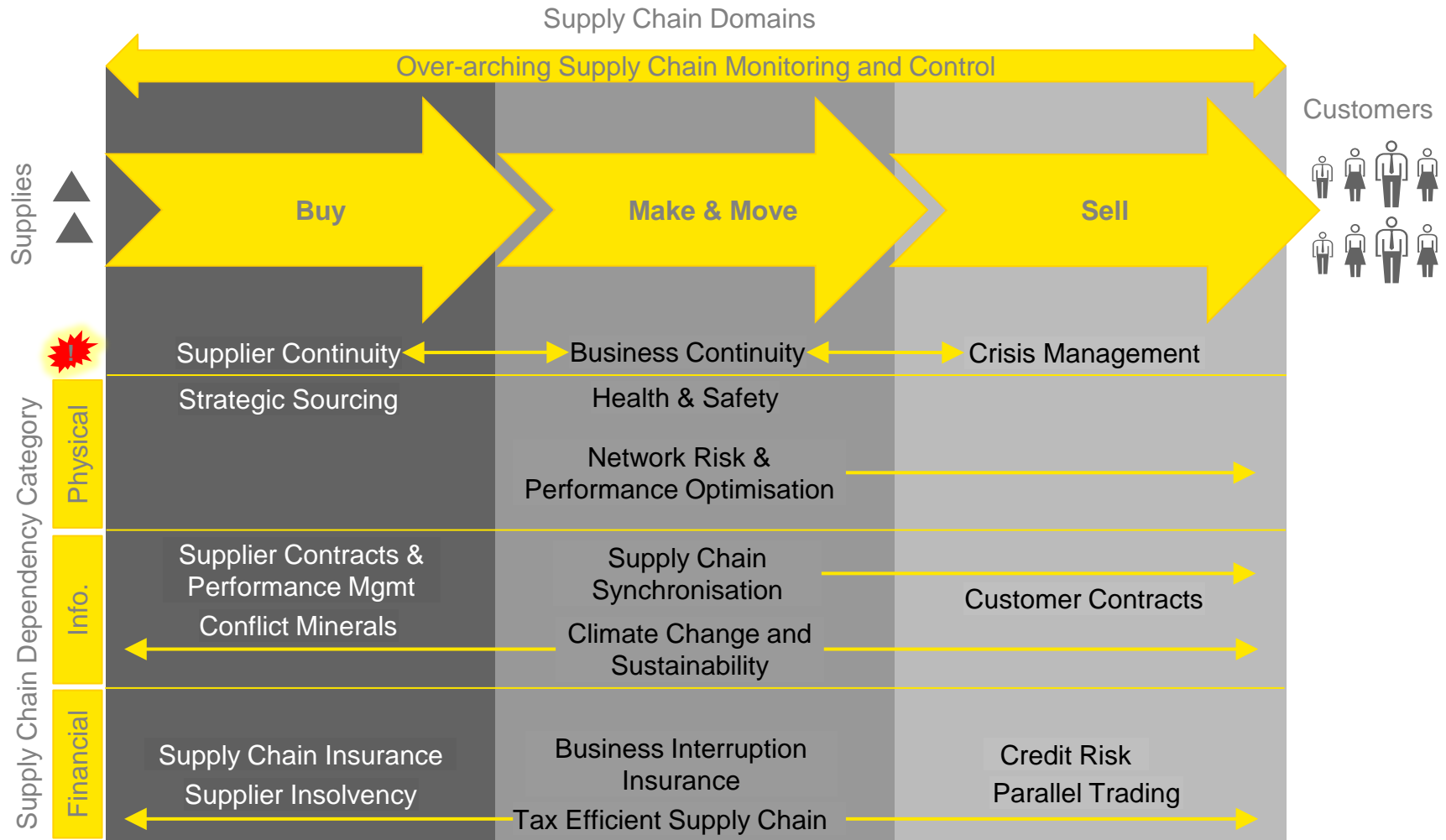
- X** Unreliability of third party commercial auditing companies
- X** Poor value for money
- X** Multiple audits of the same supplier
- X** Inconsistent corrective action plans
- X** Failure to identify/report serious labour problems
- X** Prevalence of fraudulent practices

Source: Getting smarter at auditing, Ethical Trade Initiative, 2007

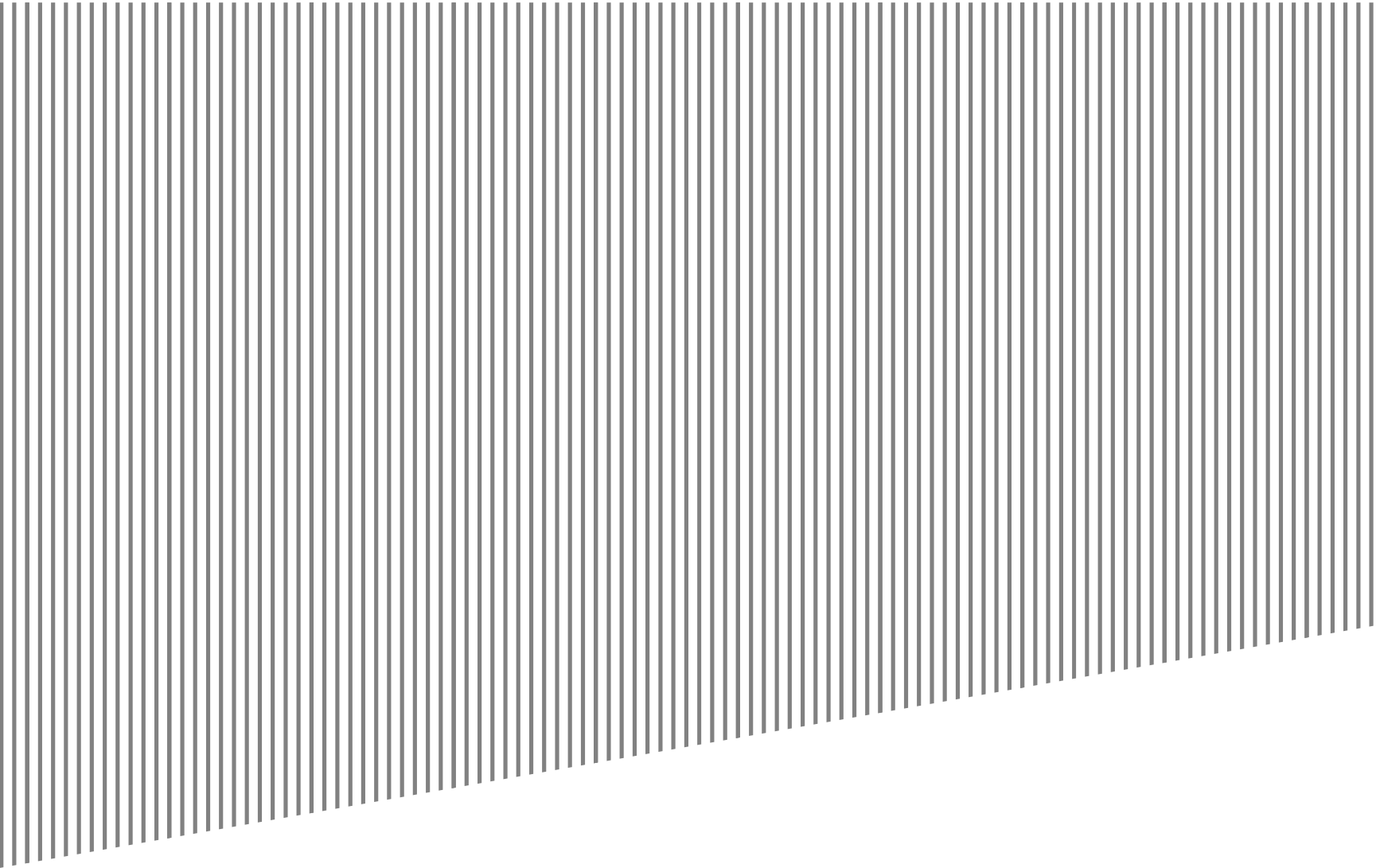
Question 6

What advice can you give to those in the audience who are looking to make sense of all the converging sustainability risk factors and determine which are material to their business?

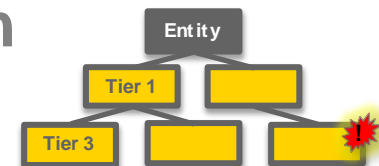
EY Supply Chain Risk and Resilience Framework, end-to-end



Backup slides



Our Supply Chain Risk assessment approach



Mapping the supply chain provides valuable decision-support benefits and may highlight improvement opportunities.

1. Map the Supply Chain

There may be a range of mitigation options, including supply chain insurance, dual sourcing, stockholding, etc.

4. Mitigation options

Applying our threat data to the supply chain network offers new insight regarding supply chain risk exposure.

2. Assess threats

A business case will clarify the net benefit to help you prioritise and secure funding.

5. Cost / benefit analysis

Impact analysis reveals how the effects of an event propagate through the supply chain network to impact your bottom line.

3. Analyse impacts

Your road map describes how risk is reduced over time as mitigation options are implemented.

6. Risk Road Map

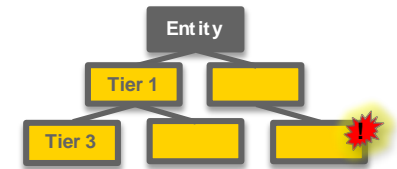
Features:

- Six-step process.
- Adaptable to your situation and needs.
- Applicable for products and for services.
- Scope by product or service.
- Working with your key personnel.
- Transferring knowledge and creating a reusable toolset adapted for you.

Benefits:

- Detects supply chain risks.
- Justifies mitigation.
- Creates implementation plan.
- Enables ongoing monitoring and reporting.

The first step is to map the supply chain



Mapping the supply chain provides valuable decision-support benefits and may highlight improvement opportunities.

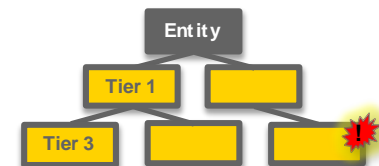
1. Map the Supply Chain

Client concerns include:

- ▶ Scale and complexity of the task
- ▶ Identifying where to start
- ▶ Recalcitrant or resistant suppliers
- ▶ Demonstrating the benefits

- ▶ Start from 'bill of material' of an identified product or service (focus on profit contribution)
- ▶ For complex products or services, further scoping based on sub-assemblies, e.g. engines
- ▶ Work down the supply chain identifying suppliers and their supplies
- ▶ Evaluate suppliers to assess whether:
 - ▶ Absence of supply has little / no impact
 - ▶ Commodity supply enabling rapid switching / substitution
 - ▶ known supplier concentration concerns
- ▶ Identify potential single points of failure and supplies to examine in more detail

Once mapped, we can assess threats to the supply chain



Applying our threat data to the supply chain network offers new insight regarding supply chain risk exposure.

2. Assess threats

Client concerns include:

- ▶ Unknown and unknowable risks
- ▶ Risk is unquantifiable
- ▶ Inability to reduce or avoid identified risks
- ▶ Risk ownership is unclear, e.g. line of business, procurement, risk and compliance

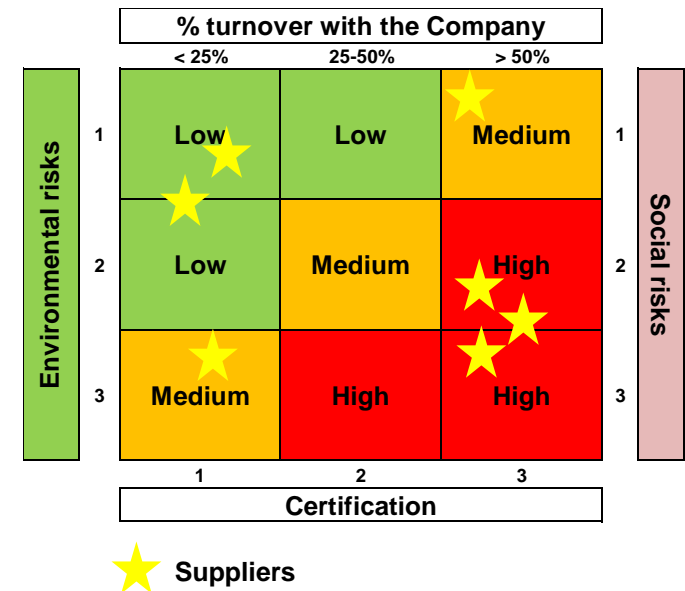
- ▶ Proven supply chain threat taxonomy
- ▶ Risk data and profiling tools (from a leading supply chain risk insurance firm) to understand where and how your supply chain could be vulnerable:
 - ▶ External:
 - ▶ Geographic (location) risk
 - ▶ Political
 - ▶ Economic
 - ▶ Structural
 - ▶ Internal:
 - ▶ Product / Service Management
 - ▶ Supplier Management
 - ▶ Supplier Selection
 - ▶ Supplier's security of supply
 - ▶ Other issues:
 - ▶ Intellectual Property
 - ▶ Regulations
 - ▶ Contract Management
 - ▶ Business Continuity

Map your procurement risks

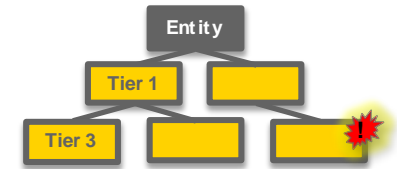
We have developed a methodology to map the risks. Example of criteria that can be taken into account:

- ▶ Product category and type of activity (what are the industry CSR stakes ?)
- ▶ Price volatility, resource scarcity
- ▶ Is the supplier sole source?
- ▶ Economic dependence
- ▶ Size (turnover and number of employees)
- ▶ Country
- ▶ Historic incidents
- ▶ Social risks (child/young labour, forced labour, H&S, freedom of association, discrimination, working hours, etc.)
- ▶ Environmental risks (explosion, fire, energy consumptions, pollution, etc.)
- ▶ Product quality

Suppliers	GENERAL INFORMATION										
	Turnover (€)	% of turnover with ESSLOR	Year	Activity	Type of product/service purchased	Number of employees	Country	Risk linked to the country	Countries of subcontractors	Risk linked to the country	
Supplier 1	100 264	90%	2013	Other Manufacturing	Other	200	Canada	1	1	1	
Supplier 2											
Supplier 3											
Supplier 4											
Supplier 5											
Supplier 6											
Supplier 7											
Supplier 8											
Supplier 9											
Supplier 10											
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Supplier 19											
Supplier 20											
Supplier 21											
Supplier 22											
Supplier 23											
Supplier 24											
Supplier 25											



Having assessed threats, we can analyse potential impact on profit



Impact analysis reveals how the effects of an event propagate through the supply chain network to impact your bottom line.

3. Analyse Impacts

Client concerns include:

- ▶ Unanticipated indirect impact from events deep in the supply chain;
- ▶ Quantifying profit impact per supply
- ▶ Delivery halted by unavailability of an unidentified and seemingly trivial and low cost supply

- ▶ Exploration of impact propagation through the supply chain, existing and potential mitigating factors and their cost, such as:
 - ▶ Capacity reduction and likely duration
 - ▶ Alternate supply capacity, availability
 - ▶ Buffer stock
 - ▶ Unaffected and substitutable products or services
 - ▶ Insurance cover
- ▶ Financial analysis of impact on profit; critical paths in the value chain and efficiency of existing mitigation measures
- ▶ Qualitative impact on brand / reputation, customer service, and so on also analysed

Understanding the risks

Issues

- ▶ What is our risk exposure related to sustainability within our procurement and along our supply chain?
- ▶ How can we maintain an effective risk awareness?
- ▶ How can we categorize suppliers according to different risk levels?

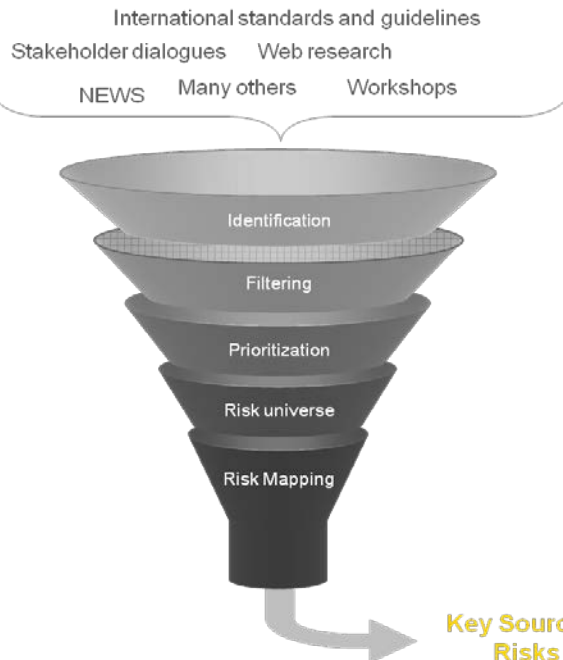
Activities

- ▶ Identify possible threats in procurement and along the supply chain
- ▶ Design and establish risk universe models
- ▶ Design and implement risk mapping tools
- ▶ Design and implement risk reporting model/tool
- ▶ Develop risk mitigation opportunities for each supplier risk grouping

Results

- ▶ Risk driver and risk catalogue
- ▶ Prioritized risks on the basis of their impact and probability per supplier category
- ▶ Commented risk definitions
- ▶ Developed templates for risk reporting

Risk assessment model

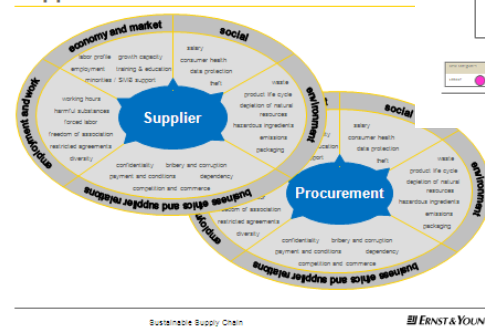


Risk assessment tools

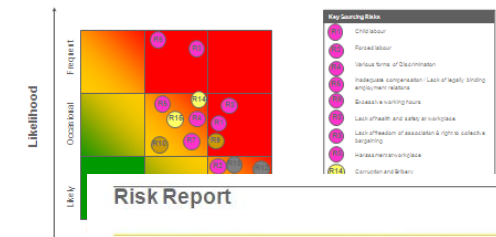
Risk Universe Sample RiskUniverse™ Model



Sample Sustainability RiskUniverse™ Supplier & Procurement



Risk Mapping




```

graph TD
    Entity[Entity] --> Tier1[Tier 1]
    Entity --> Box1[ ]
    Tier1 --> Tier3[Tier 3]
    Tier1 --> Box2[ ]
    Box2 --> Box3[ ]
    Box2 --> Box4[!]
  
```

4. Mitigation Options

- ▶ Failure to identify good practice mitigation options
- ▶ Perceived lack of mitigation options, e.g. monopoly supply
- ▶ Practicality and time needed to put mitigation options in place

- 

Implementing risk mitigation

Issues

- ▶ How do we ensure that we are working according to our policy and strategy?

Activities

- ▶ Update selection and monitoring process and procedures
- ▶ Refinement of supplier requirements
- ▶ Refinement of evaluation criteria
- ▶ Define acceptance threshold levels / risk appetite
- ▶ Develop and execute training program

Results

- ▶ Appropriate toolbox to effectively manage risk
- ▶ Aligned supplier selection and monitoring process
- ▶ Supplier awareness of ecological, social and ethical aspects as well as the sustainability strategy of the company

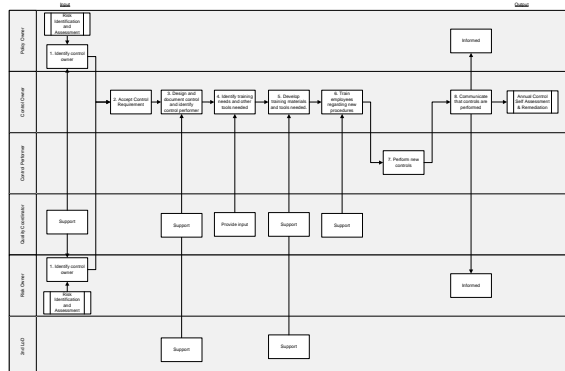
Process, Guidelines and Procedures



Templates/ Tools



Process descriptions, roles & responsibilities



Supplier requirements matrix / list

Requirement	Supplier	Requirement	Supplier	Requirement	Supplier	Requirement	Supplier	Requirement	Supplier
1. Human rights	Supplier	2. Environmental	Supplier	3. Social	Supplier	4. Governance	Supplier	5. Anti-corruption	Supplier
6. Data privacy	Supplier	7. Cybersecurity	Supplier	8. Information security	Supplier	9. Intellectual property	Supplier	10. Trade secrets	Supplier
11. Confidentiality	Supplier	12. Data protection	Supplier	13. Data security	Supplier	14. Data integrity	Supplier	15. Data availability	Supplier
16. Data accuracy	Supplier	17. Data completeness	Supplier	18. Data consistency	Supplier	19. Data reliability	Supplier	20. Data validity	Supplier

Self assessment questionnaire(s)

1. Human rights

1.1. Respect for and promotion of human rights through operations and across the supply and distribution chain.

1.1.1. To what extent is the organisation (leadership and management) committed to human rights? How committed the organisation is to adopting and promoting human rights through its operations and across the supply and distribution chain, by human rights to mean the rights described in the UN General Assembly's Universal Declaration of Human Rights

☐ Not applicable ☐ Not-existent ☐ Limited ☐ Basic ☐ Established ☐ Advanced ☐ Leading

Please indicate on the scale which maturity level that best describes the current status of your organisation. Please refer to appendix 1, page 1, for maturity level explanations for "Commitment".

Comments (required if N/A was ticked)

"Commitment"

Comments (required if N/A was ticked)

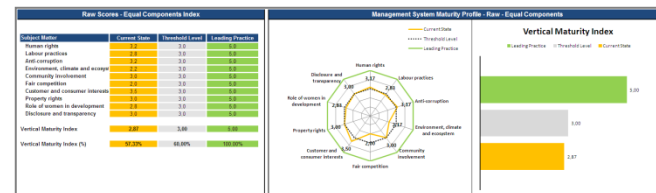
"Commitment"

Comments (required if N/A was ticked)

Evaluation criteria / maturity model

Subject Matter	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)
Commitment	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)	Not applicable (please refer to comments in the issue currently exist in the organisation)

Supplier compliance dashboard



Modifying elements of current Supply Chain Risk management for sustainability

1. Set up the Supply Chain to optimise physical flows

- ▶ Are our assets performing the right functions and placed optimally to support the flow of goods and services?
- ▶ Have we properly considered risk when setting up?

2. Optimise Supply Chain information flows

- ▶ Can we synchronise supply chain operations to enhance throughput and optimise capacity?
- ▶ Can we absorb shocks, flex and adapt if needed? Are we resilient?

3. Optimise financial yield and risk-reward trade-off

- ▶ How do I accept risk intelligently to grow profitably?

4. Supply Chain Risk ongoing management

- ▶ How do I keep my risk information up-to-date and ensure continual improvement?

Aligning governance with the risks

Issues

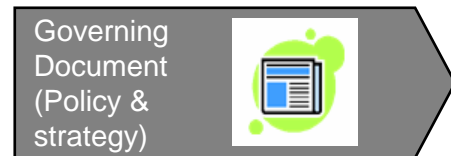
- ▶ Are our policies aligned with our risk exposure?
- ▶ Have got the right objectives related to procurement and supply chain management?
- ▶ Is our strategy still supporting our objectives?

Activities

- ▶ Review and update of procurement policy (and/or guidelines) based on risk analysis and/or relevant international sustainability guidelines
- ▶ Review and update of supplier Code of Conduct based on risk analysis and/or relevant international sustainability guidelines
- ▶ Review and refine sustainable procurement strategy and governance model with risks and/or relevant international sustainability guidelines

Results

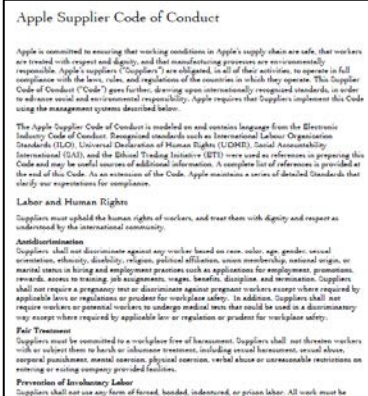
- ▶ Risk mitigating procurement policy
- ▶ Appropriate supplier CoC
- ▶ Procurement strategy and risk management model including roles & responsibilities aligned and supporting sustainability strategy



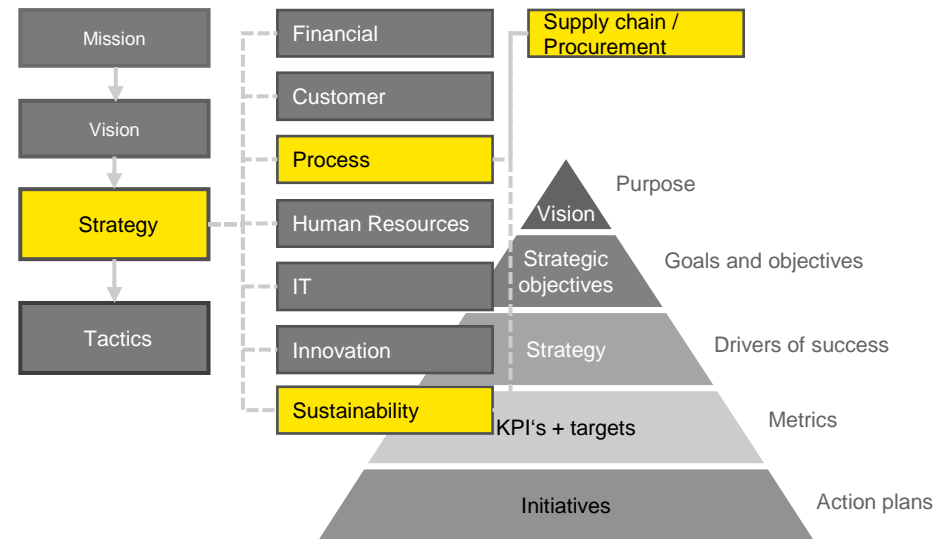
Responsible procurement policy



Supplier Code of Conduct



Procurement strategy and risk management governance model



Monitor the results and adapt

Issues

- ▶ How do we ensure our suppliers are working according to our policy?
- ▶ How do we establish credibility with our efforts so that we may use them in our stakeholder communication?

Activities

- ▶ Supplier CoC compliance audit program development
- ▶ Executing third party supplier CoC compliance audit(s)

Results

- ▶ Capability to execute high quality self managed supplier CoC compliance audits
- ▶ Possibility to confidently/credibly use supplier audits in corporate promotion

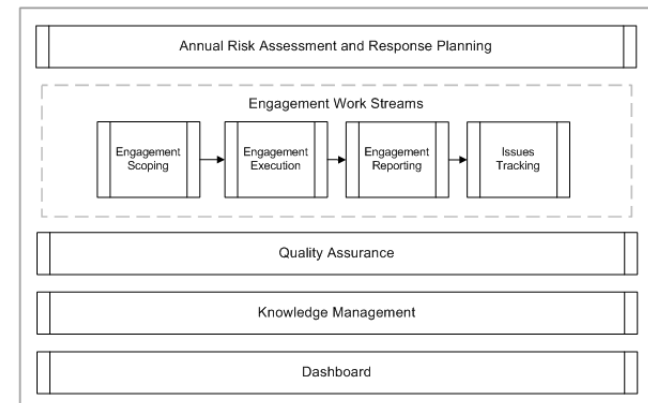
Supplier
Audit/Review



Supplier audit program

Audit Program					
Project Name: _____					
Risk/Objective	Control ID / Query Name	Control Description	Audit Strategy / Test Steps / Query Description	Work Paper Reference	Summary of Results
1. Management has not established an effective system of procedures and control processes to ensure the company meets its goals or complies with all applicable laws and regulations.	PRC00 00 00	Methods employed to carry out activities in accordance with prescribed policy and to address risks related to achievement of objectives. Examples include approvals, authorizations, verifications, and reconciliation. Policies/guidance include:	1. Determine what procedures and controls exist, if any. 2. Verify whether appropriate employees are knowledgeable of procedures and controls.	PRC00 00 00	Specific procedures have not been developed for the accounting of DEPARTMENT X costs. The GROUP X are providing assistance to accounting personnel in the accounting for COMPANY X costs. However, specific procedures – detailing costs and controls – have not been developed.
		The X report provides policy regarding accounting for GROUP X.	1. Review the transactional details of FERCs 183 and 123 and ensure activities are being performed in accordance with procedures.	<<This can also be used to link workpapers or reference specific sections in Auto Audit>>	JA performed a transactional detail of FERC 183 from DATE through DATE, verifying payments made to vendors and classified to FERC 183. A copy of the detailed analysis is attached. JA performed a detailed review of FERC 123-02183 and the amounts paid to COMPANY X, tying to the SPREADSHEET maintained by the DEPARTMENT. A copy of this detailed analysis is attached.

Supplier audit



EY | Assurance | Tax | Transactions | Advisory

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