



**Constellation Energy®**

## Defining a Strategic Risk Management Approach



The way energy works™

December 15, 2010

# Objectives of Strategic Risk Management

- The goal of Strategic Risk Management is to integrate risk assessment into management decision-making while simultaneously ensuring compliance with industry and company standards
- Individuals across the company take responsibility for risk management, understanding how their risks roll up and aggregate, taking the steps needed to bring risk levels to acceptable levels
- Enterprise risk is improved as communication is enhanced and managers take responsibility for their risks

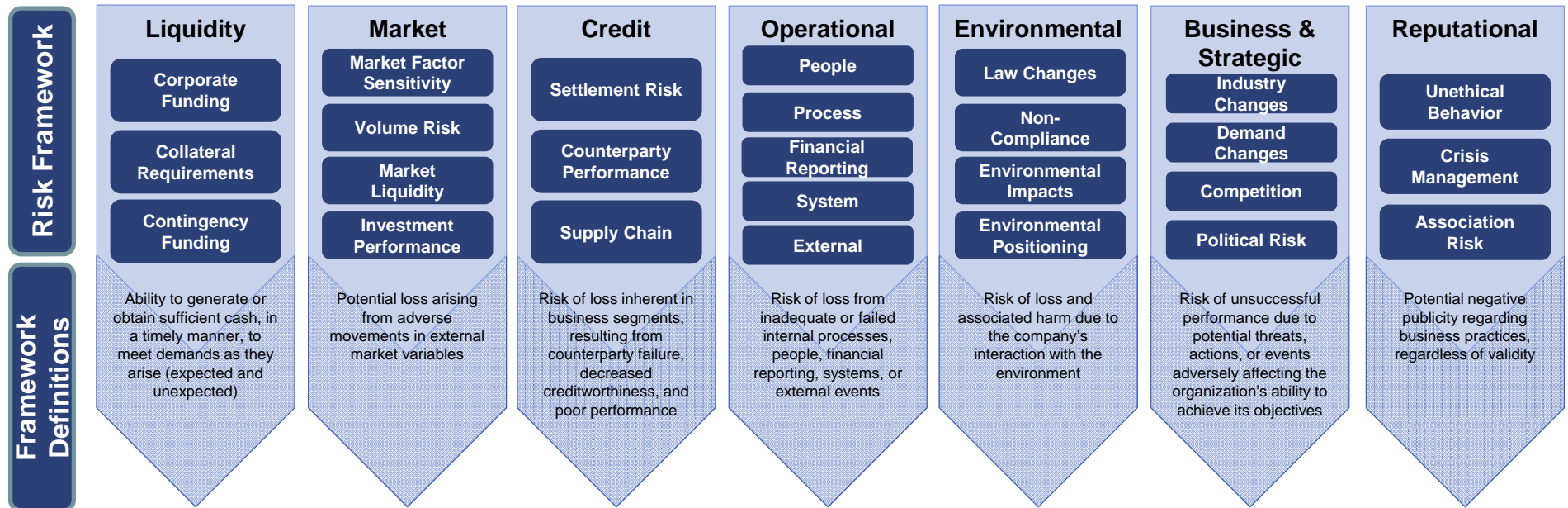
Role	Process	Output
<b>Board of Directors</b>	<ul style="list-style-type: none"> <li>• Review &amp; assess changes and outputs</li> </ul>	Improved understanding of the Company's risk profile
<b>Management Committee</b>	<ul style="list-style-type: none"> <li>• Perform Priority Risk Assessment and Own Priority Risks of the Company</li> </ul>	Common vocabulary and assessment of risk. Risk based Corporate Audit plan and Insurance evaluation
<b>Risk Committee</b>	<ul style="list-style-type: none"> <li>• Prioritize risks in Business Units</li> </ul>	Functional Priority Risks Business Unit Priority Risks
<b>Risk Management Group</b>	<ul style="list-style-type: none"> <li>• Measure, aggregate and report operational risks</li> </ul>	Risk Capital Standard Reporting
<b>Business Units and Functional Support</b>	<ul style="list-style-type: none"> <li>• Risk and Control Self Assessment</li> <li>• Metrics</li> <li>• Loss Event Data</li> </ul>	Risk Register Business-Owned Risk Assessment Control Environment Action Plans
Common Language of Risk & Control Shared Enterprise Repository (GRC)		

The strategic risk process allows management to incorporate risk assessment results into management decision making

# Enterprise Risk Management Framework

A company focused on strategic risk management constantly assesses risk factors to ensure they reflect business realities

## Enterprise Risk Management Framework



These risk factors are both quantifiable and qualitative

# Enterprise Risk Framework Definitions

By understanding these risk factors, the company can develop a strategy for risk optimization, performance improvement and the mitigation of negative impacts to the business

Risk Category	Description
<b>Liquidity</b>	The risk stemming from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimize a loss, or the risk of shortfall in net available liquidity to meet obligations.
<b>Market</b>	Risk of loss in trading and accrual portfolios and liquidity primarily from fluctuations in external market variables, such as commodity prices.
<b>Credit</b>	Risk of loss primarily from a counterparty's inability to meet its obligations; includes loan-like and derivatives settlement risk exposure.
<b>Operational</b>	Risk of loss and from inadequate or failed internal processes, people, systems or from external events.
<b>Environmental</b>	Risk of loss and associated harm due to the company's interaction with the environment.
<b>Business &amp; Strategic</b>	Risk of unsuccessful performance or strategy failure due to potential threats, actions, or events that adversely affect the organization's ability to achieve its objectives.
<b>Reputational</b>	Potential of negative publicity regarding business practices, regardless of validity

Within any company, there should be a consistent language of risk and control

# Integrated Risk Assessment

- Risk assessments should be owned by the business with input from the functional support groups to assist in the identification and quantification of risks
- To ensure a cohesive risk process, all business units and functional support groups use a common language of control and business processes

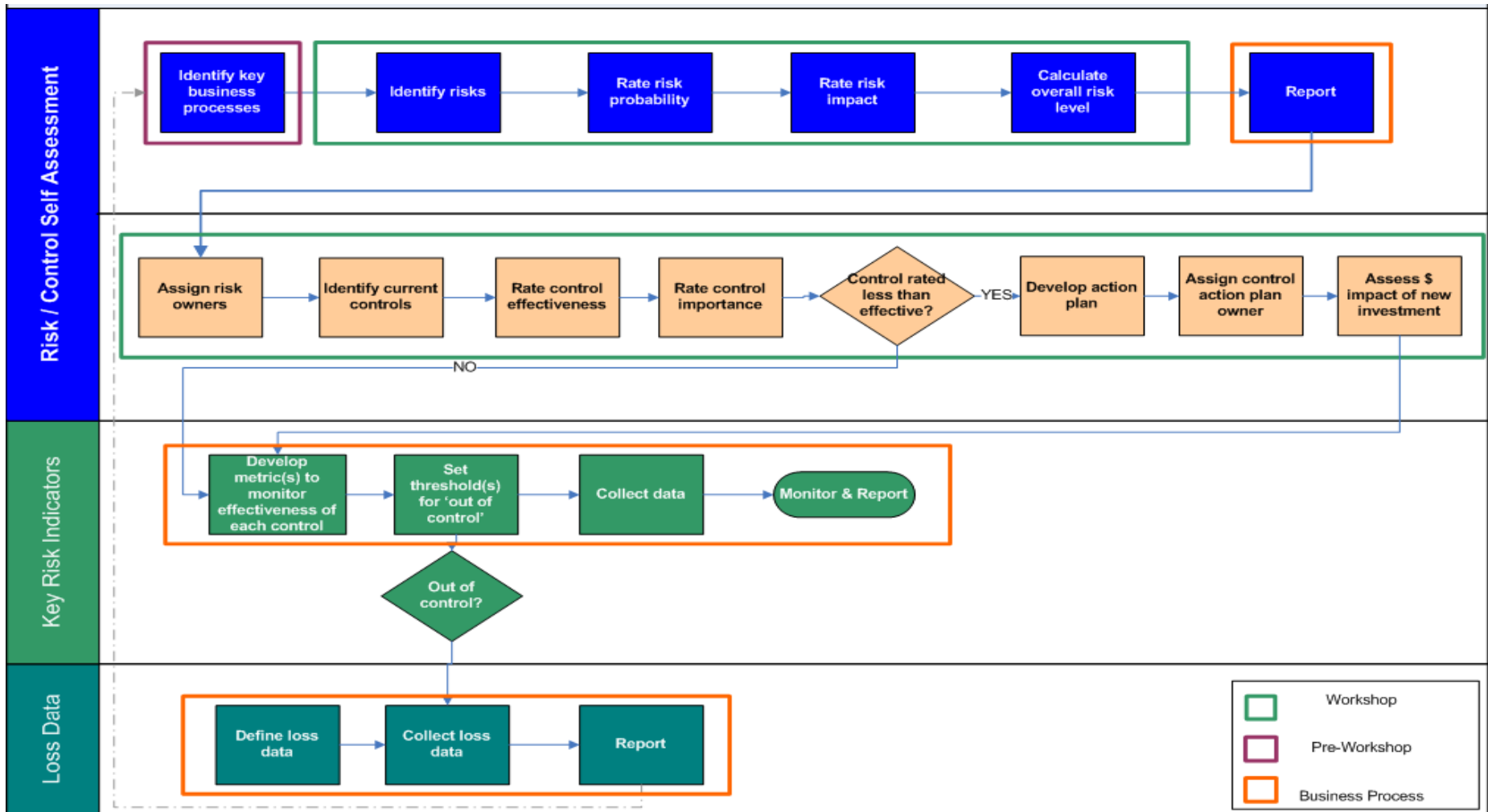
## Functional Groups that are actively involved with risk management include:

- Risk Management
- Human Resources
- Corporate Security
- Regulatory Compliance
- The Finance/SOX Group
- Corporate Audit
- The Environmental Group
- Information Technology
- Legal
- Business Continuity



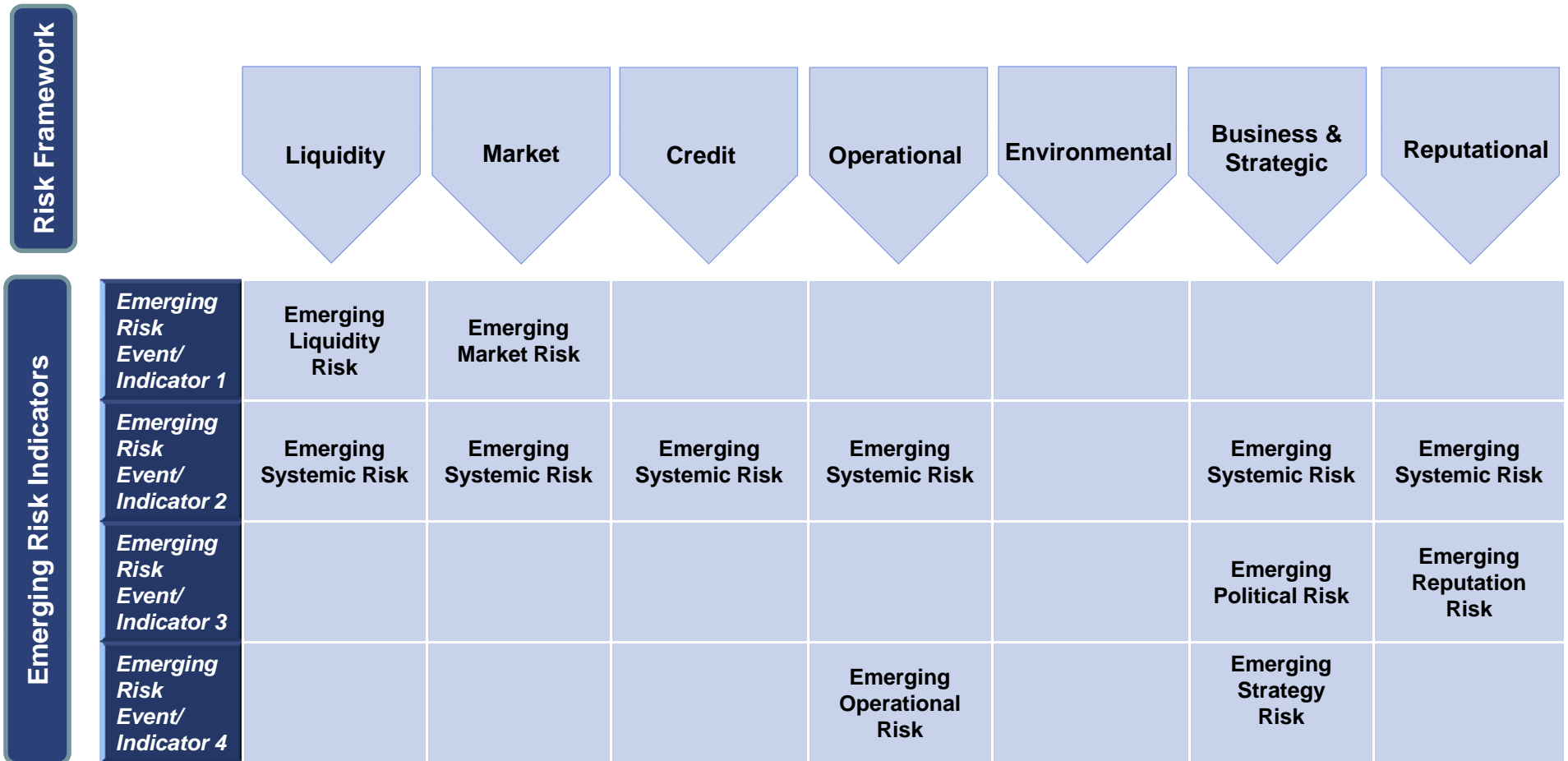
Functional support areas play a critical role in evaluating a company's strategic risks

# Integrated Risk Assessment Process



# Emerging Risks

- To build and maintain an effective risk management framework, a company must continuously evaluate the risk landscape



# The benefits of an integrated risk model

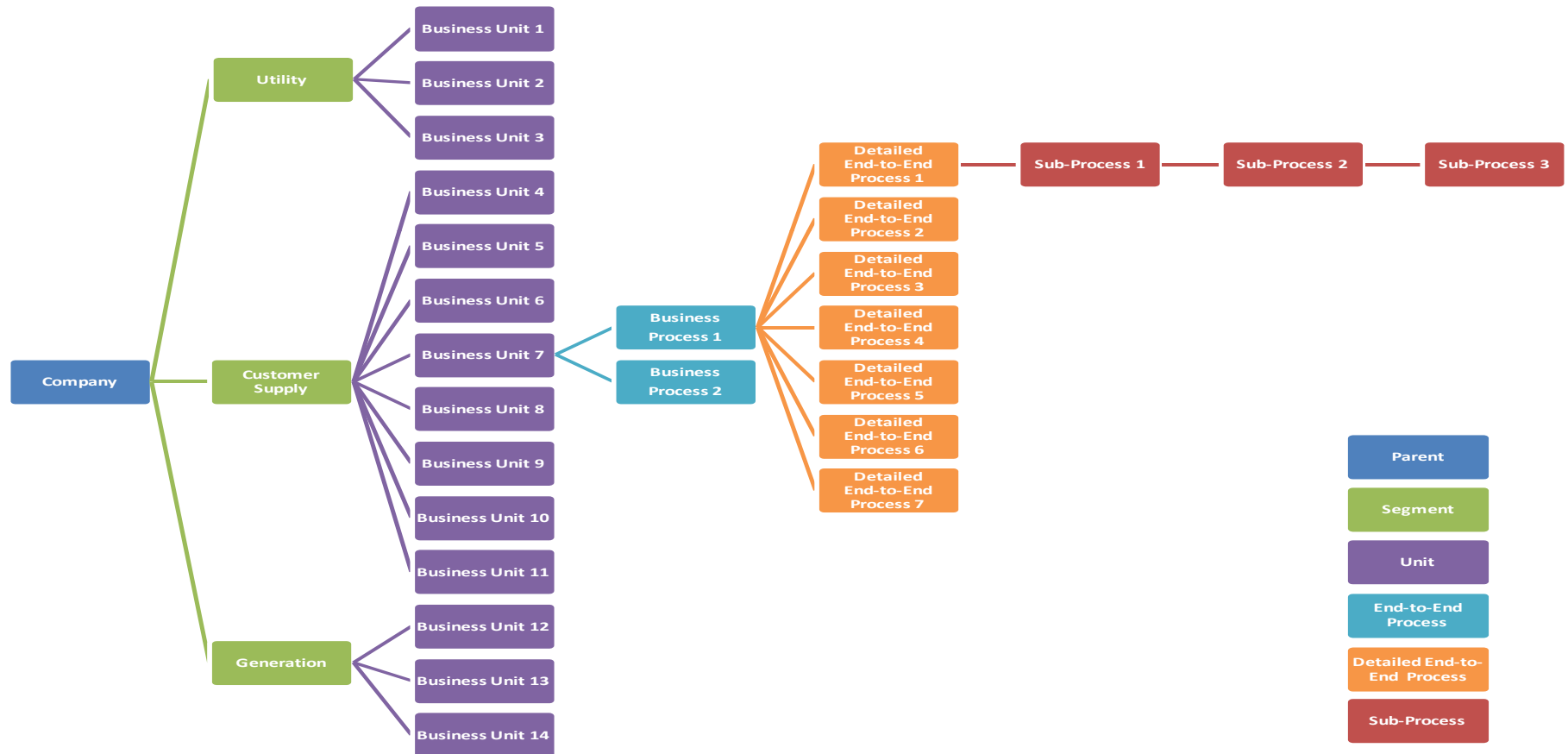
- Governance, Risk and Compliance (GRC) tools often offer a single integrated platform that eliminates redundant systems across functions (e.g., SOX, Audit and Risk) and duplicative efforts
- This ensures each functional support unit is leveraging the same processes and data sets

Business Units/Support Function	GRC Benefit
<b>Financial Reporting</b>	Consolidation of financial reporting risks for SOX 404. Ability to perform control testing and evaluation, and to issue/action plan management.
<b>Regulatory Compliance</b>	Risk aggregation of risk and controls for regulatory reporting.
<b>IT</b>	Risk assessment for applications and infrastructure/disaster recover/ cyber security
<b>Environmental</b>	Identification and documentation of environmental risks and exposures. Consolidated metrics reporting
<b>Corporate Audit</b>	Leverage risk assessment results to plane reviews for completeness of risk identification and adequacy of plans to enhance controls or the risk acceptance.
<b>Risk Management</b>	Risk identification, issue/action plan management, and loss event data management
<b>Overall Business Units/Functions</b>	Automates manual processes and disparate systems/websites. Also reduces inefficient communication traffic.

When a GRC platform is in place, risk identification can occur in any area, mapped back to each business process

# End-to-End Business Process

Identifying and documenting the detailed end-to-end business processes can be a critical step towards providing visibility to the business and toward evaluating risks at each process

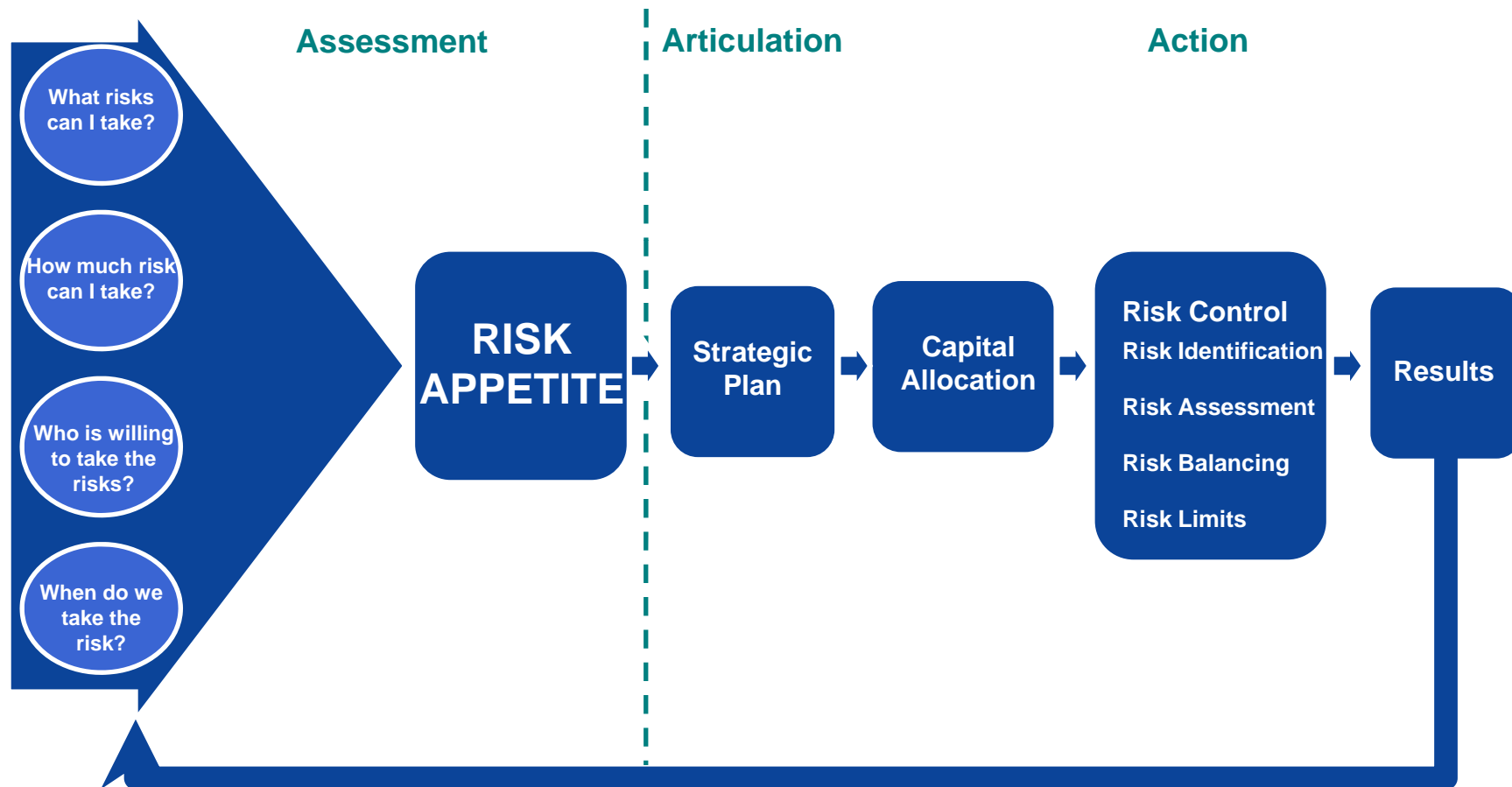


- Parent
- Segment
- Unit
- End-to-End Process
- Detailed End-to-End Process
- Sub-Process

With this end-to-end business processes, the business unit evaluates and identifies the most significant risks that could cause business process failure and impact the business unit's performance

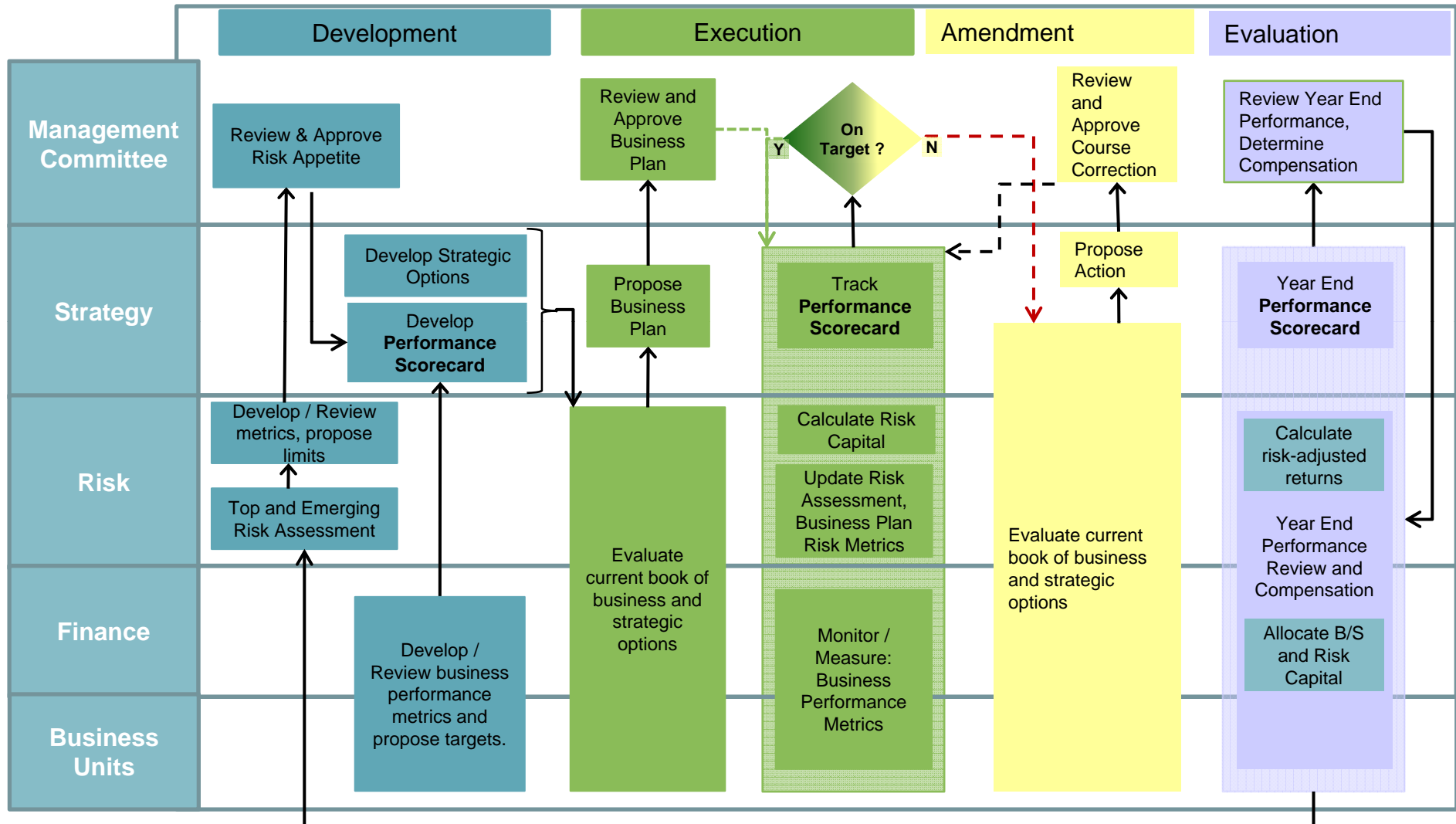
# Strategic Management Process – Risk Appetite

- Risk management integration into the planning and strategy development process begins by defining the risk appetite of the company commensurate to strategic goals



Risk management should be integrated in every phase of the strategic management process, from development to execution to amendment to evaluation

# Integration of SRM into the Strategic Management Process



Strategic risk management guarantees a strong connection between risk management, finance and strategy

# Strategic Risk Management Capabilities

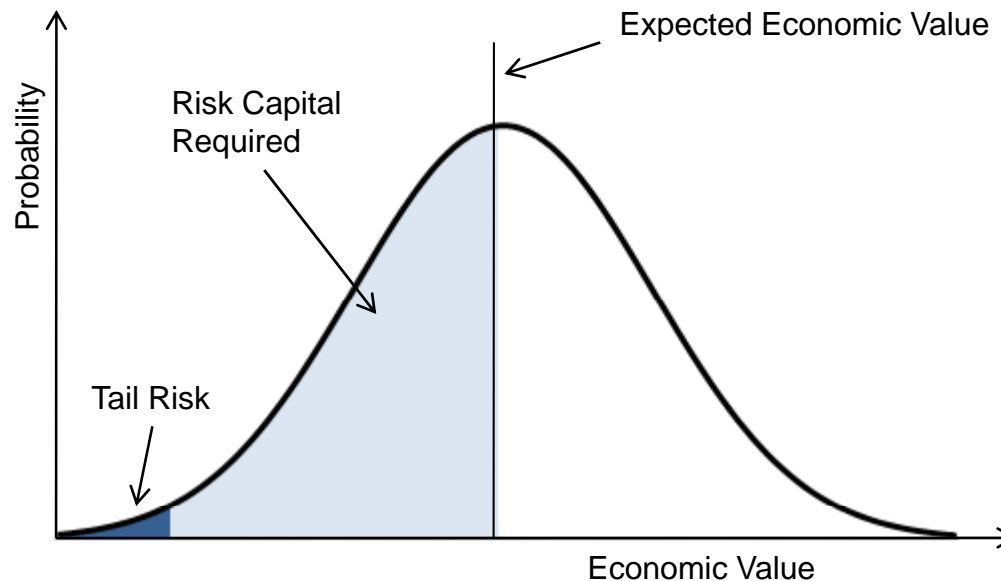
- In addition to Traditional Risk Management functions, SRM emphasizes the ability to optimize risk from a company wide perspective



SRM links all risks to the company's strategy, taking a proactive and methodological approach to optimize them

# SRM linked to Capital Management

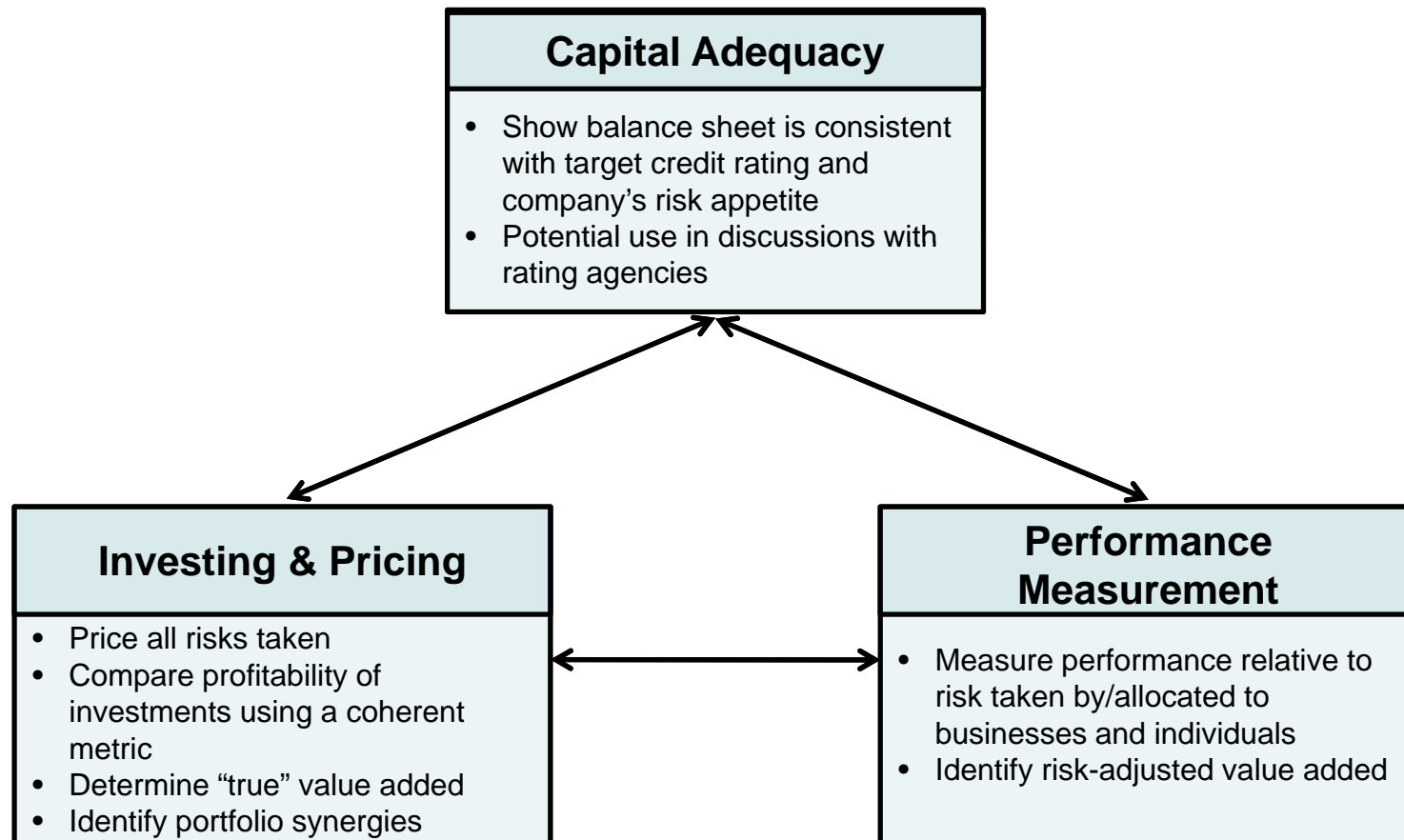
- Risk Capital serves as the foundation for the company to make appropriate capital allocation and investment decisions



Risk Capital is defined as the level of capital required to offset the effect of an unexpected specified stress on economic value

# Benefits of Risk Capital Management

- Risk capital allows a firm to determine whether its balance sheet is consistent with its target credit rating and risk appetite



Risk capital is used to not only measure investment/pricing effectiveness and capital adequacy but also to measure the performance of business units or individuals relative to the level of risk taken

# Challenges specific to Energy Sector

## • Market Risk

- Commodity price
- Volumetric risk
- Economic factors
- Event risk
- Credit/liquidity risk
- Operational risk
  - Aging infrastructure

## • Regulatory Risks

- Regulated vs. Unregulated environment
- State and local agencies
  - PSC
  - State EPAs
- Federal oversight
  - FERC
  - NERC
  - EPA
- Carbon legislation
- Tax credits for renewables
- State based renewable portfolio standards

These challenges make the exercise of strategic risk management beneficial to all stakeholders, including investors and employees who want to understand management's readiness and ability to manage

# Defining a Strategic Risk Management Approach

**Questions?**



# Constellation Energy®

## End



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