# **Key Risk Indicators**

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### **Key Risk Indicators**

**Concepts and Examples** 



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### Protecting and enhancing organisational value

Key Risk Indicators (KRIs) can provide more meaningful information to both set and achieve strategic goals

**Define Sources Establish KRI Identify Risk** of Risk What resources & capabilities do we need to manage risks to acceptable levels as we Identify key assumptions underpinning implement our strategy? When to Play and How to Win options What Strategic risks must How can we monitor emerging risks which we effectively manage to can adversely impact on our strategy? i.e. Define and evaluate events or achieve our goals & What "risk sensing" capabilities do we scenarios that can impact WTP & HTW aspirations? need choices – positively or negatively Agility to respond to material risk events if they occur **Configuration of** What Are Where Required **How to Win? Processes and Our Goals and** to Play? Capabilities? Systems? **Aspirations?** Embed risk assessment into the strategy development process How much risk will we accept Monitor and report on lead and lag risk in order to achieve our goals Review and test assumptions (Risk adjusted indicators and aspirations? i.e. What is forecasting) Embed risk sensing into strategic risk

Identify key lead and lag indicators and create

early warning indicators

our risk appetite?

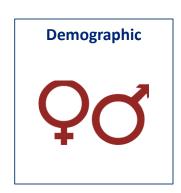
review processes

### **Understanding sources of risk**

Today's companies face a growing number of **disruptors**, which can **generate strategic risks** that may go unrecognised and unaddressed. Through KRIs, organisations can better anticipate risks, adapt to disruptors and seize opportunities.

- Disruptors are trends and forces that will likely impact and even transform — an industry by opening up new and different value opportunities as well as additional areas of risk
- **Disruptors include the following trends and forces**, which impact ways in which all industries and companies strategise and perform:











### **Understanding sources of risk**

#### Key findings - Drivers of value loss



#### Challenge

Incentive programs that reward shortterm performance may create unsustainable models of profit and

companywide risks.

#### Consideration

How compensation and culture can

impact risk taking by the company. Does it encourage risk taking within or outside the bounds of the **company's risk** appetite?

M&A can sometimes fail to deliver the anticipated value.

The viability of the M&A deal to deliver anticipated returns under different and stressed economic

scenarios.





#### Challenge

Unexpected "black swan"

events often caught companies by surprise, leading to value-killer losses.

#### Consideration

Deploying broader scenario planning

and stress tests to envision and plan for the consequences of a broad range of risks and rare

events.



#### Challenge

Almost 90% of the companies suffering the

greatest losses in value were exposed to more than one type of

risk. In most cases, an event exposed one major weakness that cascaded through the organization.

#### Consideration



Not looking at risks in isolation.

scenarios to assess what could go wrong in

confronting the event and subsequent events across an enterprise and the ecosystem. Identify and evaluate buffers that help mitigate against cascading risks.



The global financial crisis made liquidity risk more salient

and increased the cost of capital to those with high leverage and low ratings.



Current liquidity and cash reserves, and stress test the ability to

navigate a future credit crisis.

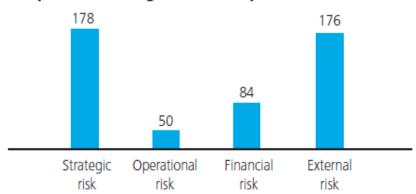
Work to ensure sufficient lines of credit from traditional and alternate sources of capital.

#### Source:

"The Value Killers Revisited", Deloitte, 2014

### Understanding sources of risk – value killers

Exhibit 5. Frequency of risk events across 100 public companies with largest value drops5



#### Source:

"ASX Corporate Governance Council Principle 7 Recognise and Manage Risk", 3rd edition, Group of 100, Deloitte, 2014

#### Exhibit 4. Four broad categories of risk

#### Strategic risks

- Demand shortfalls
- Customer losses/problems
- M&A problems
- Pricing pressures
- Product/services competition
- Product problems
- Regulation
- R8D
- Management change
- Corporate governance
- Miscommunication/false guidance
   Supplier losses

#### Financial risks

- Poor financial strategies
- Asset losses
- · Goodwill and amortization
- Liquidity crises
- · High debt and interest rates

#### **Operational risks**

- · Earnings shortfall
- Cost overruns
- Poor operating controls
- Accounting problems
- Capacity problems
- Supply-chain issues
- Employee issues and fraud
- Noncompliance
- High input costs
- IT security

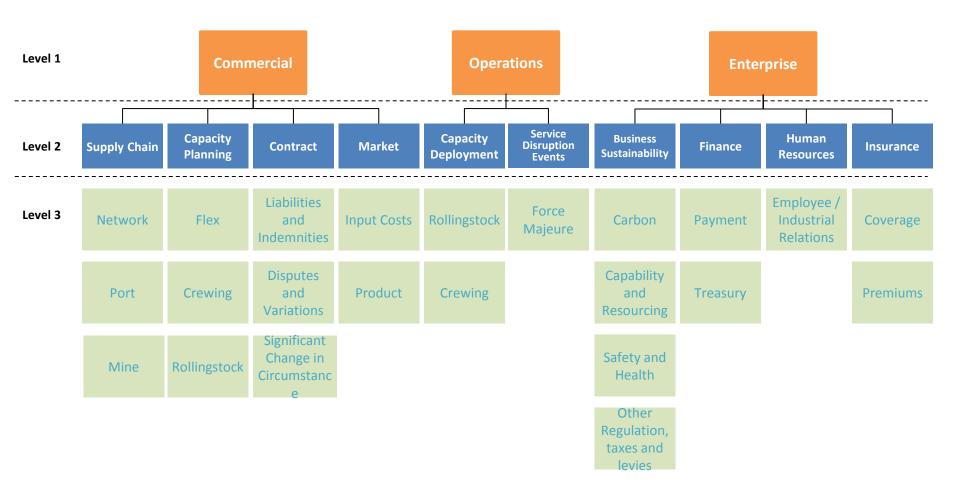
#### **External risks**

- Declining commodity prices
- Rating impacts
- Industry crises
- Legal risks
- Country economic issues
- Weather losses
- Partner losses
- Political issues
- Terrorism
- Foreign economic issues

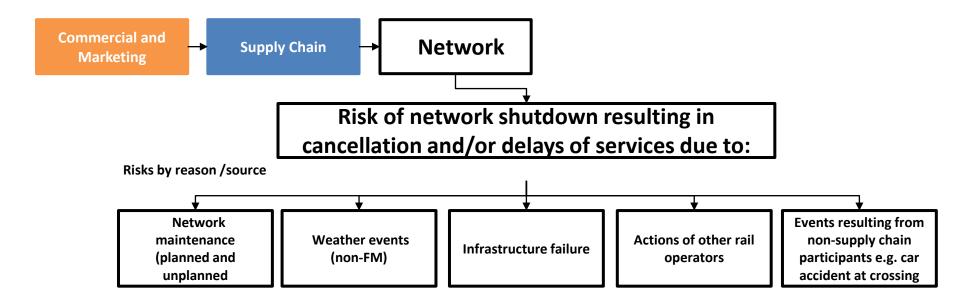
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### **Example – commodity transport**



### **Example – commodity transport**



#### **Some potential KRIs**

- Cancelled services #/% (lagged)
- Delayed services #/% (lagged)
- Forecast rainfall (leading)
- Network volume / usage forecast (lagged/leading)
- Network scheduling historical patterns (lagged)
- Asset maintenance compliance (lagged)
- Mine/commodity supply/demand (leading)

It should be noted some lagged indicators can be used to derive predictive/leading indicators

### **Linking KRIs and Risk Appetite**

#### **Key strategic risk:**

Failure to deliver on customer expectations for new service offerings including pricing, scalability, privacy, security and sales

#### Illustrative only

		indstrative only	
Directional statements	Sources of risk	Key Risk Indicators	Example
No Appetite Wilful breaches or breaches of laws or regulations such as the Privacy Act and CCA	<ul><li>Regulatory - Consumer</li><li>Regulatory - Privacy</li></ul>	<ul><li>Product segment complaints #</li><li>product segment complaints #</li><li>CCA, Privacy Breach</li></ul>	Customer re-reports faulty services within 7 days  Capacity
<b>Low Appetite</b> for lack of growth	<ul> <li>Strategic – Product</li> <li>Strategic – Growth</li> <li>Financial – Shareholder</li> </ul>	<ul> <li>Sales revenue vs. plan</li> <li>Product market share vs. plan / trend</li> </ul>	15% Appetite Upper limit 10% Profile trigger
Low – Moderate Appetite Customers – service and product offerings that impact the ability to attract and retain customers	<ul> <li>Operational – Customer</li> <li>Strategic – Product</li> <li>Strategic – Growth</li> <li>Strategic – Pricing</li> <li>Financial – Shareholder</li> </ul>	<ul> <li>Customer satisfaction score</li> <li>Overall product satisfaction score</li> <li>No Level 1 Complaints Day</li> <li>Gaps to best competitor</li> <li># Calls into call centre and right first time</li> </ul>	No Lower Limit  Escalation  Lower trigger  Lower
Technology and Networks – Poor system and data integration	<ul> <li>Operational – Business Continuity</li> <li>Operational – Technology and Networks</li> </ul>	<ul> <li>System availability %</li> <li>% transactions online vs. plan</li> <li>Customer re-reports faulty</li> <li>services within 7 days</li> </ul>	Risk profile is between the upper trigger and limit. Escalation to consider out express permission of KRM's General n. strictly prohibited.

### **Using KRIs**

Credit Risk

#### **Appetite Statement**

Will ensure client monies are only placed with approved depository institution that are rated AA, as a minimum and is within established risk limits





#### Critical Measure



### **Key Risk Indicators**

Measure	Status  Limit  Capacity
BankA (US)	<b>\$120m</b> \$130m \$140m
Bank B (ANZ)	\$50m \$80m \$100M

Health & Safety

#### Appetite Statement

No appetite for death, permanent disability or time lost because of insufficient safety protocols

#### Dashboard

Current

Trend =

Outlook

### Critical Measure



#### **Key Risk Indicators**

Measure	Status	Limit	Capacity
OHS Compliance Training completed(%)	97%	90%	N/A
Project risk safety assessment Residual risk rating	Avg. 7.4	8.0	N/A

Failure

#### Appetite Statement

Moderate risk appetite with manual systems and outage of non-critical internal systems.

There is a low appetite for risks associated with the integrity of financial reporting systems that may result in reporting of information that is inaccurate and/or not timely.

#### Dashboard

Current

Trend

Outlook

#### Critical Measure (system outages)



No of days of outages

#### **Key Risk Indicators**

Measure	Status	Limit	Capacity
System category A MTO actual/testing	97.8%	90%	99.8%
System Category B lower MTO actual/testing	88%	80%	N/A



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EnergyAustralia



# A snapshot of EnergyAustralia in 2013



Powering the lives of 2.7 million Australian homes and businesses

Making a lasting

\$1.6 m in sponsorships, donations and community

Keeping our people safe the ultimate goal is **zero harm** 

# **EnergyAustralia**

#### **Power generation**

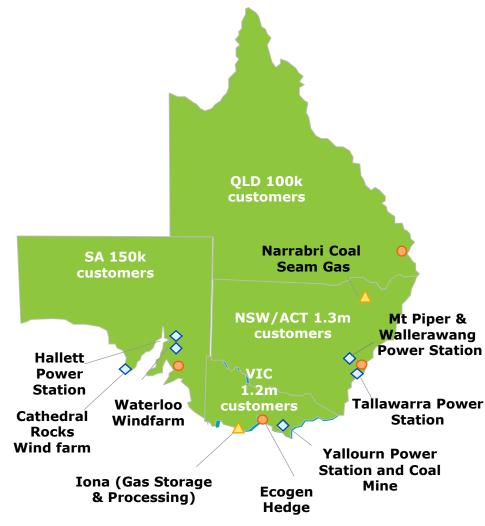
- The largest privately held supplier of generation output to the National Electricity Market ("NEM")
- A reliable fuel supply through ownership and diversification

#### Retail electricity and gas

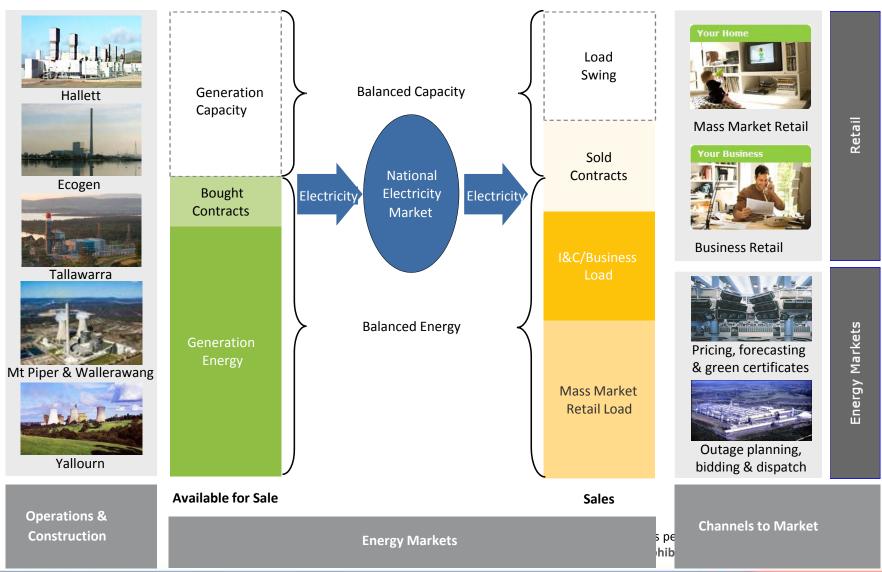
 Australia's third largest retailer (market share of 25%)

#### Gas processing and storage

- Owner of the largest underground gas storage facility in Australia
- Long-term gas storage contracts



# **Vertical Integration**



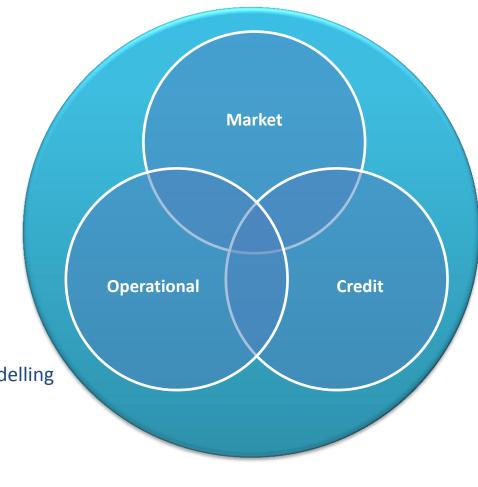
## Interesting KRI fact...

A study in 2009 found that 40% of financial services firms were in the process of developing and implementing KRIs however there is not much information on the type of KRIs being developed and their effectiveness in managing operational risk.

# **EnergyAustralia Risk Environment**



## **Management of Risk**



#### **Energy Market risk** measures:

- Stress Tests
- Earnings at Risk
- Volumetric Limits

### **ERM:**

- Risk profiling
- Distribution modelling
- Risk Committee reporting
- KRI monitoring

- **Counterparty contractual** agreements:
- Wholesale trading
- C&I Portfolio
- Procurement
- Treasury Limits
- Contingent Liabilities

### **KRI Context**

So what are we looking for?

**Trends** 

**Data Patterns** 

Interdependencies

### And what is our purpose?

Support executive decision making for the achievement of our strategic objectives.

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-2 September, 2014 Sydney, Australia

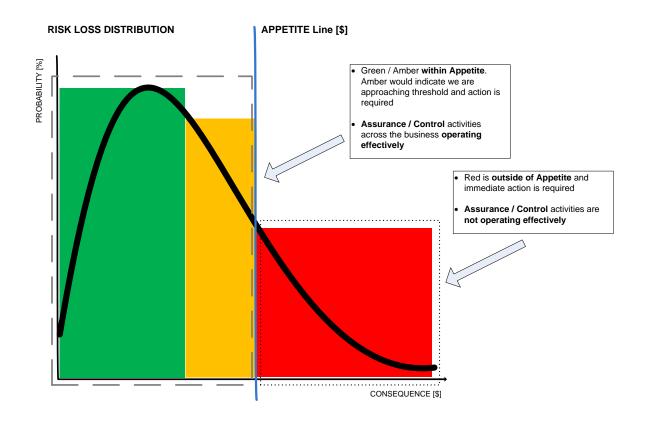
# The analysis

### Our BU's develop quantitative and qualitative KPI's

Gr	oss Online Sales	YTD		•
L	LUB > 30 days (active & final)	Mth End		•
F	Registration pipeline > 90 days	Mth End		•
(	Grade of Service C1	Mth End	•	
4	Abandonment rate	Mth End	•	
A	ASA	Mth End		
(	C1 Ombudsman Complaints/10k acc	Mth End	0	•
St	rategic NPS	Mth End		•
EE	ВП (m)	YTD	•	
ġ	Sales Acquisition Vol - GWh	YTD	•	•
Sales Retention Vol - GWh		YTD		
(	DPEX excl Bⅅ (m)	YTD	•	•
	Gross Margin (m)	YTD	•	

### ■We analyse these KPI's for impact on the Risk Profile

### Are we observing a change to the Risk Appetite?



### KRI BOARD REPORTING

	Risk	Indicator	Q1	Q2	Q3	Q4	Commentary
	Safety	Total Injury Frequency Rate	•	•	•	•	
	EA Integration Project	SIT Phase 2 / Program Testing	•	•	•	•	
	Mass Market Bⅅ	Unbilled > 30 days	•	•	•	•	
		Collections (SLA performance)	•	•	•	•	
		Bad Debt to Revenue Ratio	•	•	•	•	
	People, Processes,	Vol T/O (%) Rolling 12 mth avg	•	•	•	•	
		Unscheduled Absence (%)	•	•	•	•	
NAI		Trading Risk Management System	•	•	•	•	
<b>SATIC</b>		DRP Program Status	•	•	•		
OPERATIONAL		BPO Optimisation	•	•	•	•	
		Overdue audit items past due date	•	•	•	•	
	Reg Change and	# of sig/higher breaches / mth	•	•	•	•	
		# of ombud. comp/10k accts / mth	•	•	•	•	
		RCAP Status	•	•	•	•	
	Catastrophic Plant Failure	Plant Maintenance Plan Performance	•	•	•	•	
		Forced Outage Factor Maintenance	•	•	•	•	

# LEADS TO DECISIONS BASED ON PREVIOUSLY ANALYSED COST/BENEFITS

# HOW DID WE DEVELOP OUR KRI CAPABILITY?

- Define our tolerance to strategic objectives
- Identify leading indicators based on the key drivers of our business
- Assign thresholds to indicators and focus risk discussion on amber / red indicators
- Report forward looking
- Drive a decision or an action
- Importantly: we (Corporate Risk) didn't create more reporting from the business, we use indicators the business has already built and is using to report.

### **EXAMPLE: WHOLESALE GROSS MARGIN**

**Driver:** 

Usage

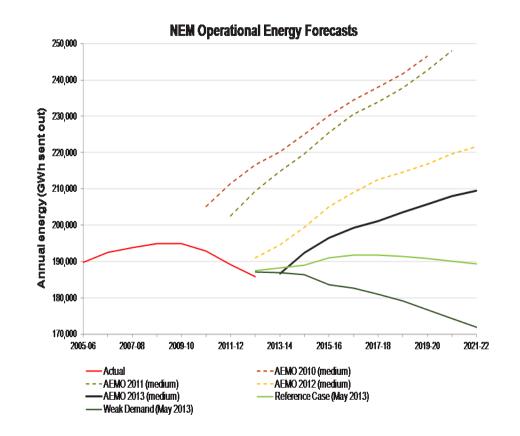
#### **Impacts:**

Weather

**Technology** 

Structural Economic shift

**Behaviour** 



# KRI DRIVEN ACTIONS in 2013/2014

- Establish new governance
- Third party sales agents
- Plant maintenance regimes
- Asset life maintenance plans
- Establishment of Enterprise Project Management Office
- Travel policy (Melbourne/Iona on same day)
- Spares parts inventory purchase of transformers
- Purchase of Weather derivative products (mild winter/summer)
- Relinquish option to purchase wind farm

### **Thank You**