



55th Canadian Chemical Engineering Conference

Metro Toronto Convention Centre, Toronto, Ontario, Canada, October 16-19, 2005

Process Safety and Loss Management

Creating a Safety Culture at Suncor Energy Inc.

Presented by:

Bill Bain, P.Eng., Ph.D.

**Corporate Manager Environment Health & Safety
Suncor Energy Inc.**

Outline

- Setting the Context
- What is Suncor's "Journey to Zero"
- Culture Change Interventions
- Moving from Awareness to Engagement to Changed Behaviours
- Next Step: Institutionalizing New Safety Behaviours
 - Process Safety Management
- Impact on Safety Performance



Setting the Context: “Culture”

- “Corporate culture is the pattern of shared beliefs and values that give the members of an institution meaning, and provide them with the rules for behavior in their organization.” (Stanley Davis, 1984)
- Safety culture is the facet of culture that directly relates to safety activities

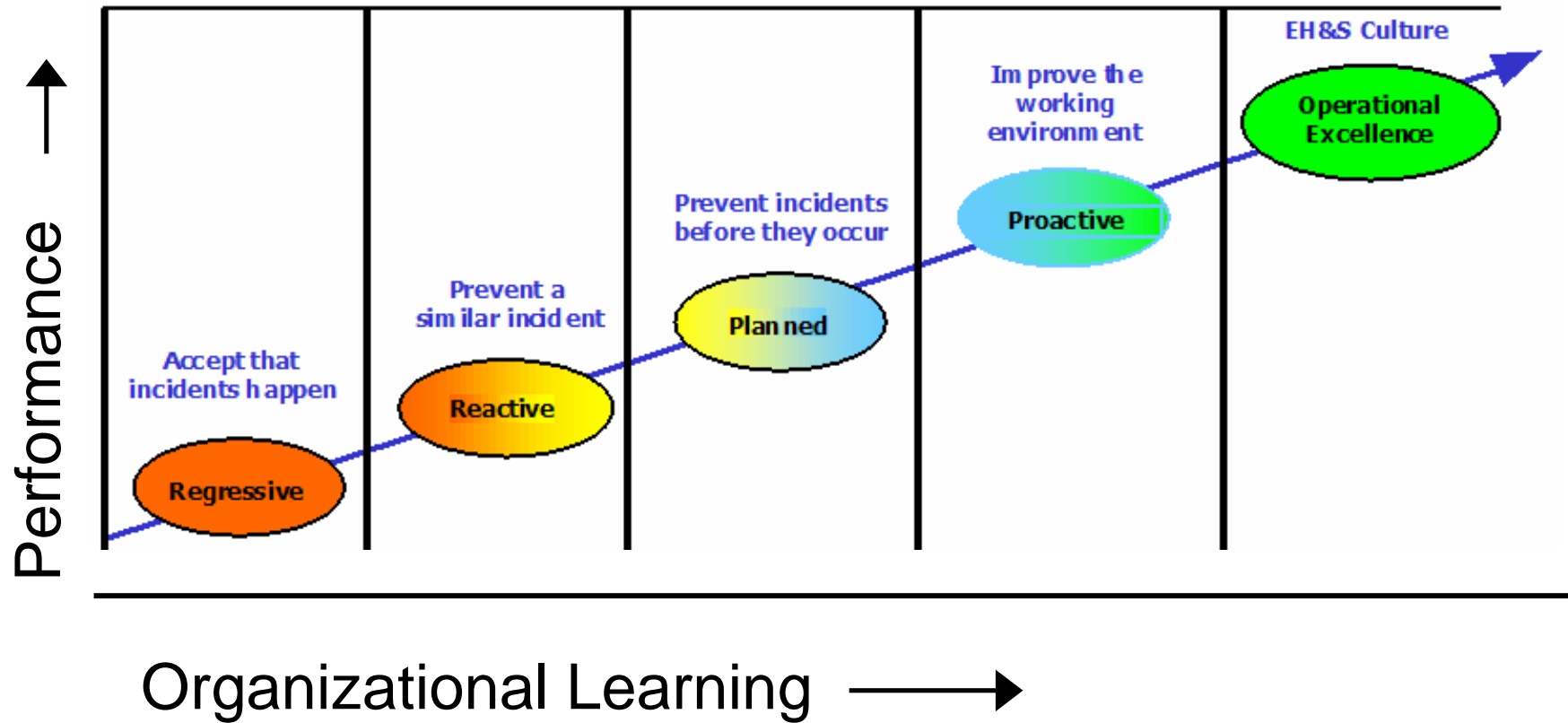


Culture and Corporate Effectiveness

- Consensus
 - Consistency
 - Clarity
-
- We will get better safety performance if our safety culture has appropriate consensus, consistency & clarity



EH&S Maturity Roadmap - excerpt



Adapted from BHP Billiton

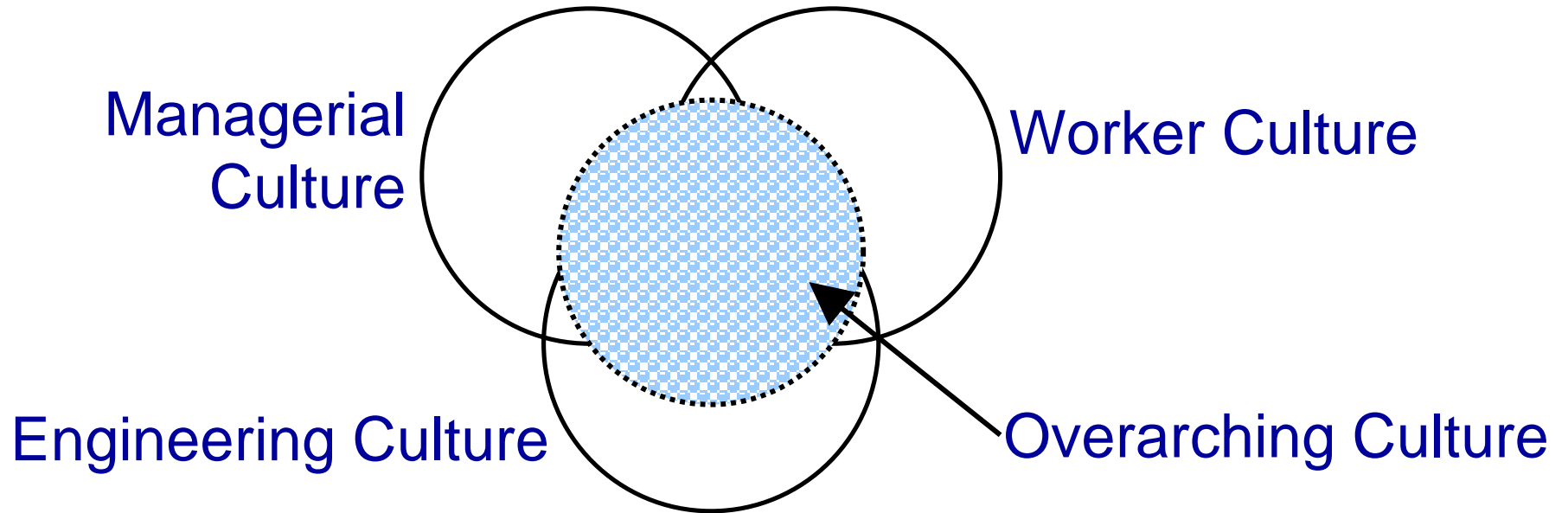


Impact of Sub-Cultures

- There are numerous sub-cultures in organizations
- Consensus, consistency and clarity most evident at subculture level
- How does existence of sub-cultures impact safety culture change efforts?



Sub-Cultures and Culture Change



Engineering Sub-Culture

- To what extent does it view safety systems as:
 - “Clockwork” or mechanical
 - Structures and processes are defined
 - Organization & individuals behave in predictable & controllable ways
 - “Clockwork plus human”
 - System components have social and technical facets
 - Recognizes role of culture
 - Values, beliefs, attitudes can be determined by senior management and instilled in every employee



Impact of Sub-Cultures

- “Employer’s actions to change the safety culture may have much less impact on employees’ perceptions than the signals given out by day-to-day management decisions and attitudes which may appear to have little to do with safety and health.” IOSH, 1994



Setting the Context: Suncor Energy Inc.

- Integrated oil company - upstream, refining, pipelines & marketing (Sunoco in Ontario)
- Market capitalization \$30 billion
- Strategically focused on the Athabasca oil sands
- Production capacity of more than 260,000 BOE/day
- Part of a growing renewable energy industry
- Approximately 5,000 employees



Suncor Energy Inc

Oil Sands
■ Fort McMurray

**Natural Gas and
Renewable Energy**
■ Edmonton

■ Calgary

**Energy Marketing
and Refining**

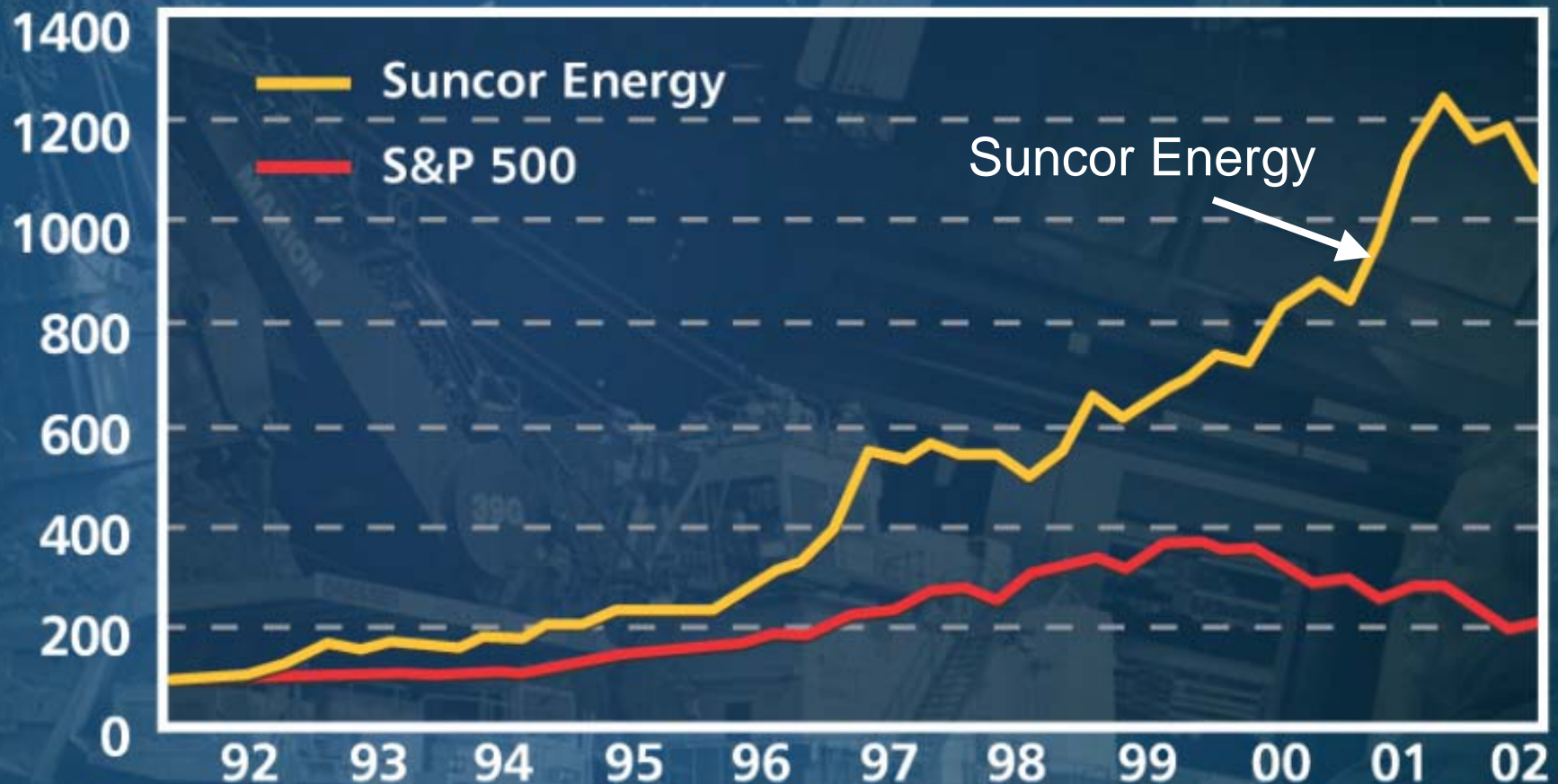
■ Toronto
■ Sarnia

**Refining and
Marketing, USA**
■ Cheyenne

■ Denver

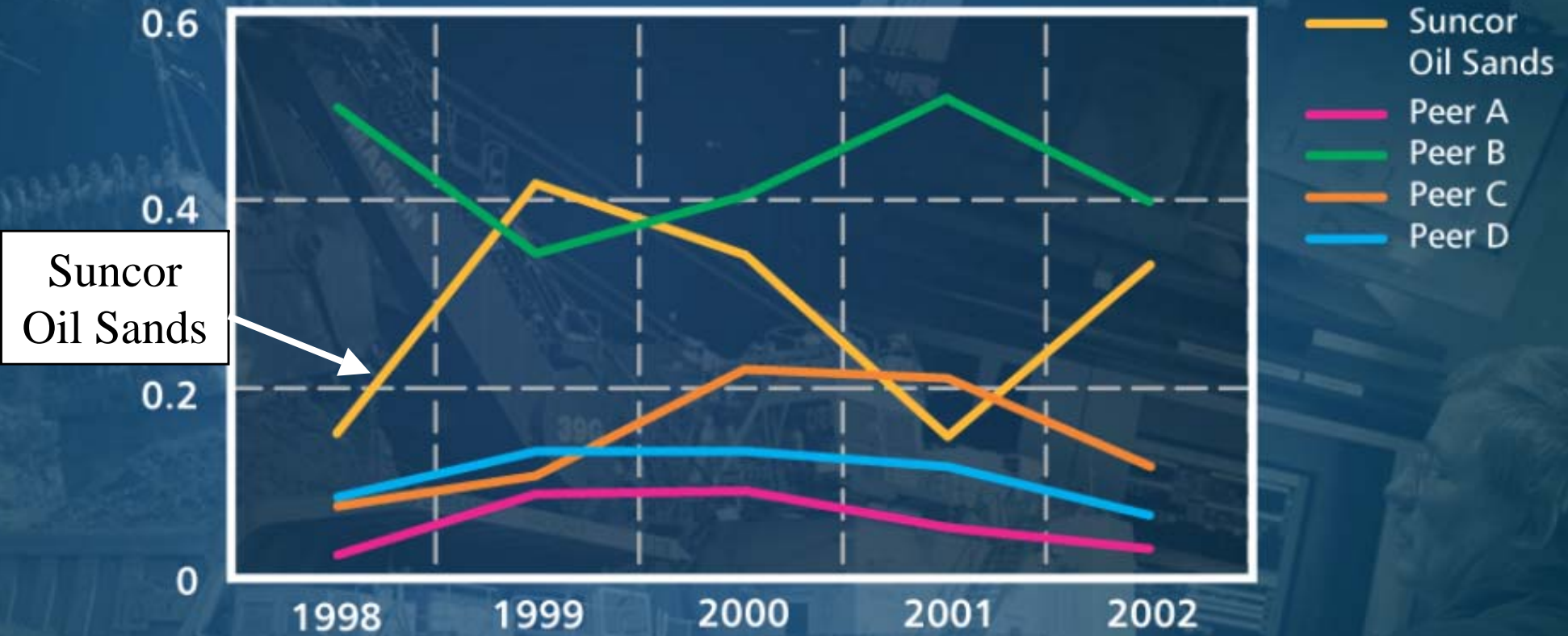
Safety Context in 2002: Equity Appreciation

Based on C\$100 invested March 31, 1992



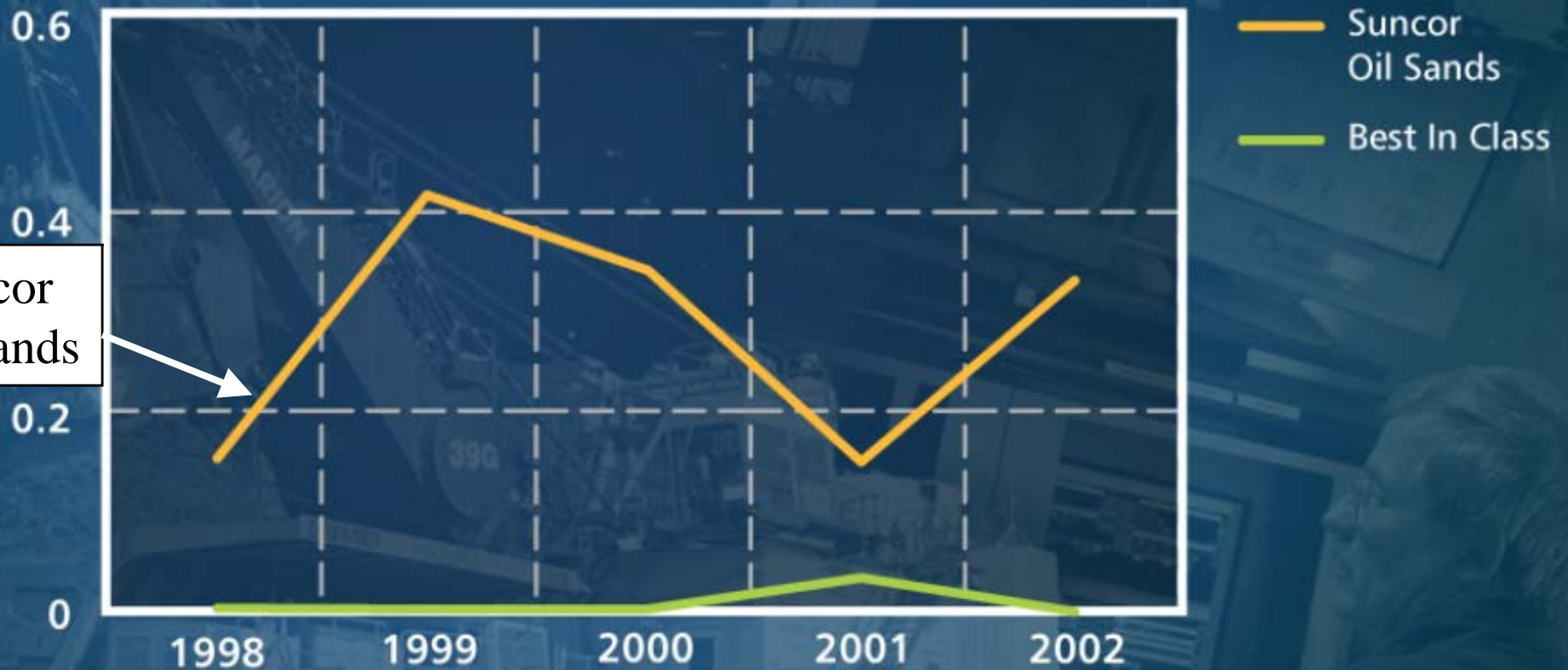
Safety Context in 2002: Employee Safety

Lost Time Injury Frequencies (Injuries per 100 Employees per Year)



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Suncor
Oil Sands

History: How Journey to Zero Began

- Vision set by Rick George CEO and the Suncor Corporate Committee in mid-2002
 - Not happy with the current safety performance
 - Saw need to align our organization with an operational excellence focus where superior safety is key



Journey to Zero: What does it mean...

- “Journey to Zero” is Suncor Energy’s vision for a workplace that is free of all occupational injuries and illnesses
 - Current focus on safety: “zero injuries”
- “Journey to Zero” is ... a culture change



DuPont's Future State Visioning Process

- Our first key intervention



DuPont's Future State Visioning Process

- Our first key intervention

Present State

An Honest Assessment Of
Where We Stand Today



DuPont's Future State Visioning Process

- Our first key intervention

Future
Environment

Future State Vision
What We Could Be &
Want To Be

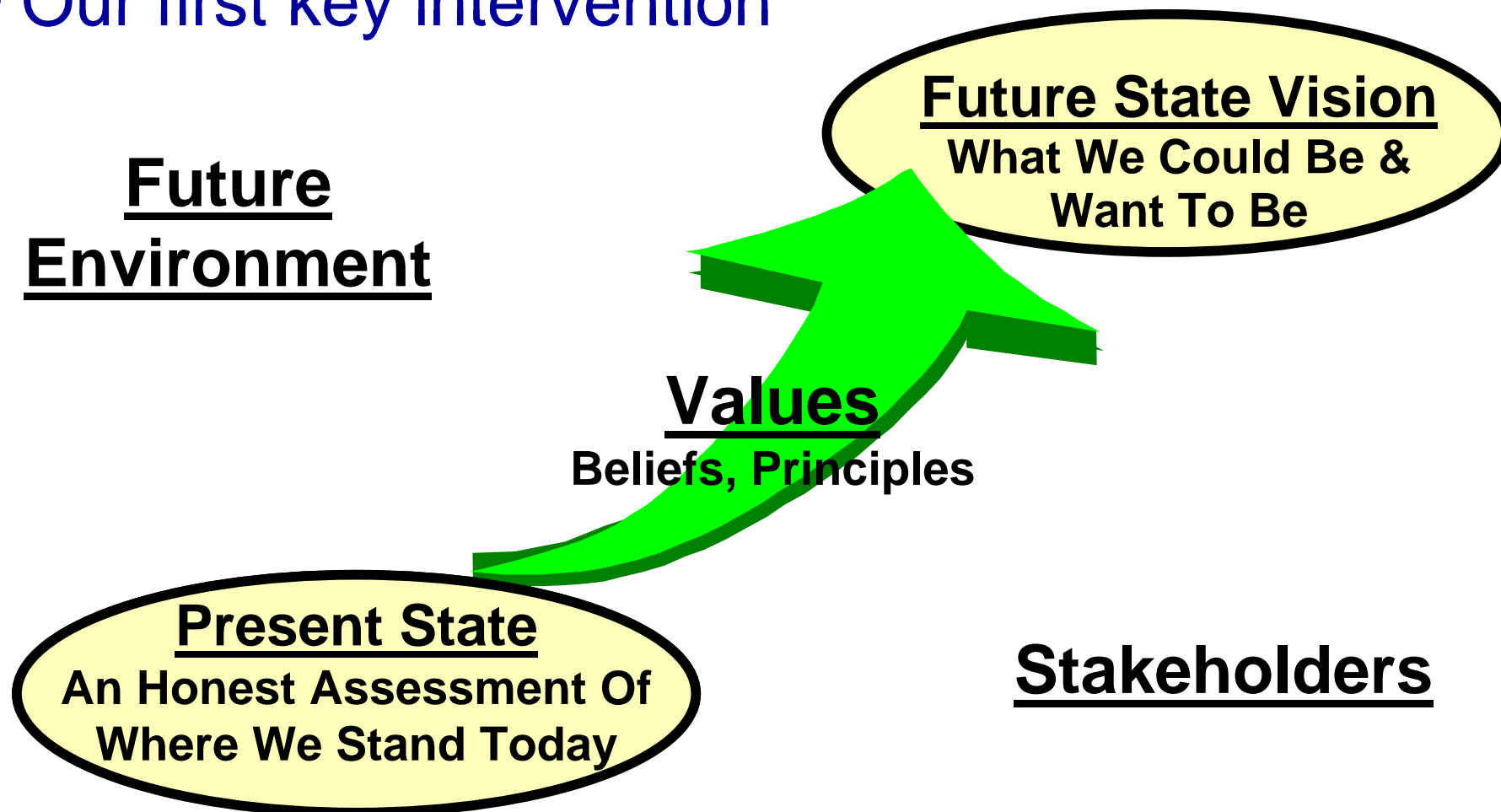
Present State
An Honest Assessment Of
Where We Stand Today

Stakeholders



DuPont's Future State Visioning Process

- Our first key intervention



Outcome of Future State Visioning Process

- Awareness
 - We are not doing well - therefore a business case for change
 - Senior management is sincere and serious
 - Value driven
 - Culture change
- Engagement
 - Part of the Problem & Part of the Solution
 - High level action plans
- (Changed Behaviours)



“Bridging the Barriers” Workshops

- 27 two-day sessions for Suncor employees
 - Led by Suncor senior management
 - Facilitated by DuPont
- Over 3,000 participants



“Bridging the Barriers” Workshops

- Day 1 - Engaging the minds
 - Comparison with world class benchmarking
 - Honest reflection
 - Describe desired future state & present state



“Bridging the Barriers” Workshops

- Day 2 - Engaging the hearts
 - Injured worker presentation
 - Review story with embedded conflict
 - Ask for personal commitment
 - Clarify expectations - accountability



Outcome of “Bridging the Barriers”

- Awareness
 - We are not doing well
 - Senior management is sincere and serious
 - Value driven
 - Culture change
- Engagement
 - Part of the Problem & Part of the Solution
 - Some specific action plans
- Changed Behaviours



Current Focus: “Sustain/Institutionalize New Safety Behaviours”

- Objective: ensure a critical mass is modeling new behaviours so that new safety culture is institutionalized:
 - Supported by updated policies, procedures, expectations / consequences, active co-worker intervention

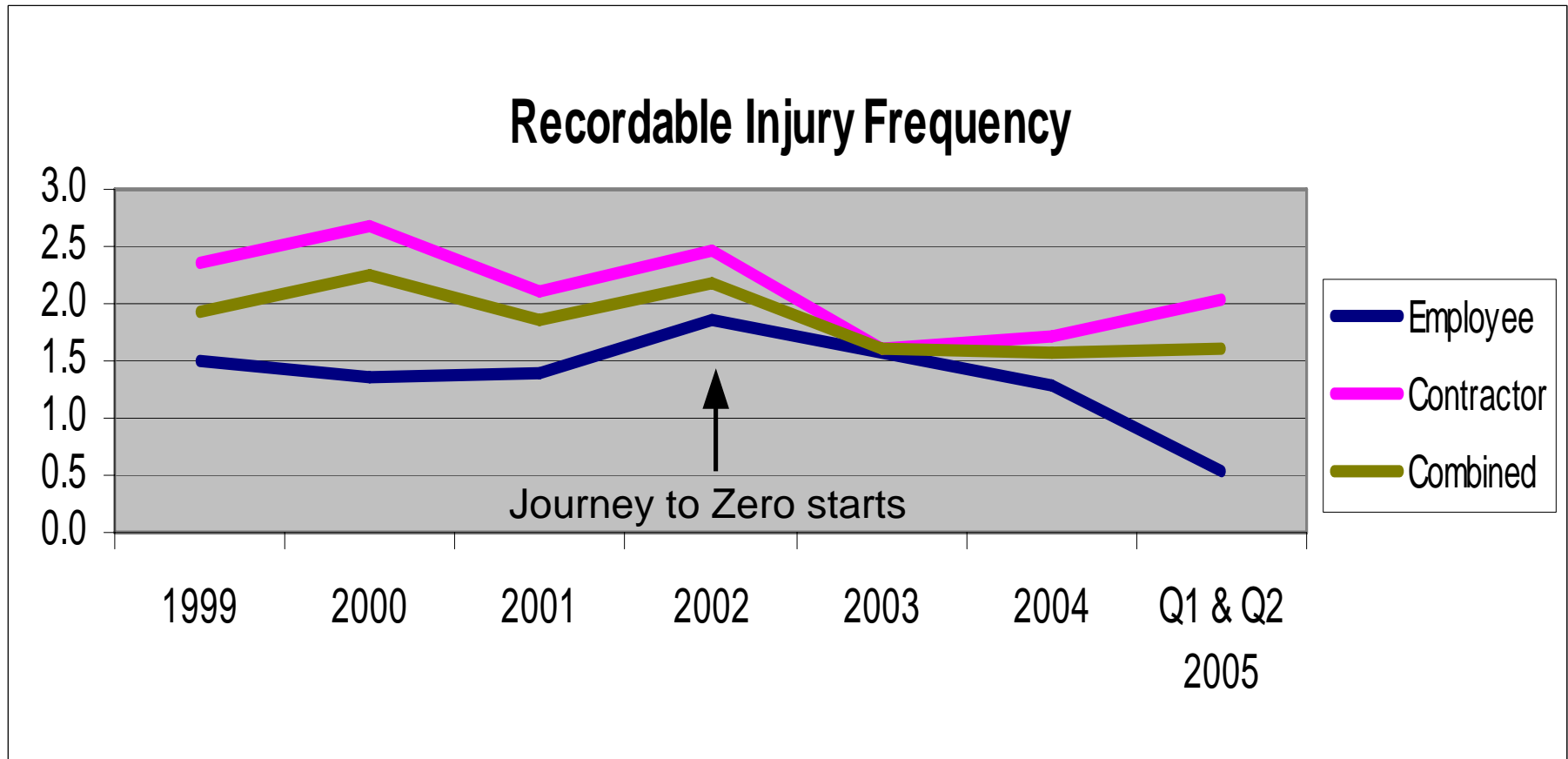


Process Safety Management

- Concurrent focus on:
 - Process and tools, for example:
 - Management of Change
 - Pre-startup Safety Review
 - Maintenance and inspection process
 - Process Hazard Analysis
 - Incident investigation – Root Cause Analysis
 - Culture required to move from compliance to commitment



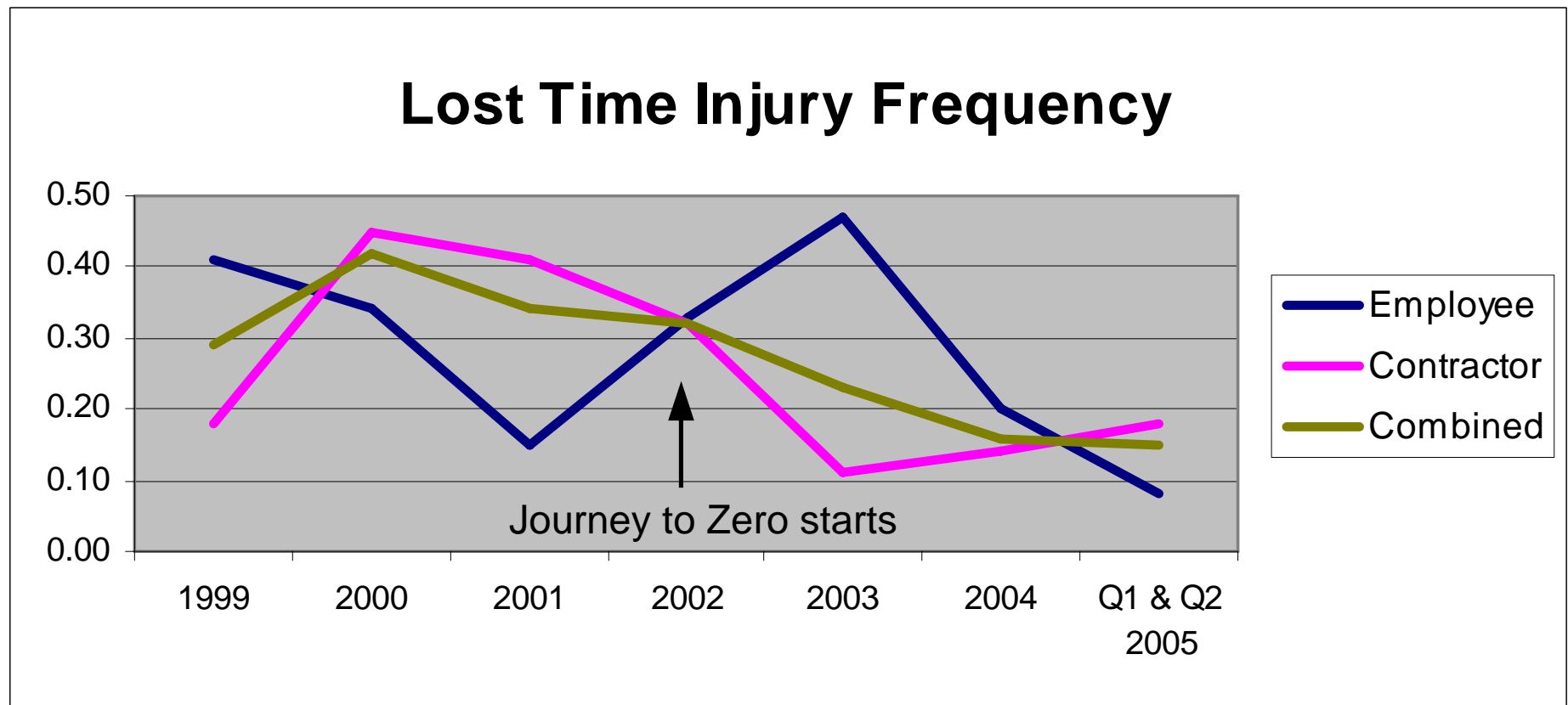
Progress to Date: Three Years into Suncor's Journey to Zero



Progress to Date:

Three Years into Suncor's Journey to Zero

- Other indicators also show encouraging progress



Summary

- Building a Safety Culture requires:
 - Leadership
 - Vision of the future / Business case
 - Moving people through various stages:
Awareness – Engagement – Behaviour Change
 - Institutionalizing new behaviours



Any Questions?

Contact information:

Bill Bain

bbain@suncor.com

403-269-8699

