

**Alcan Primary Metal - British Columbia (APM-BC)  
Pollution Prevention Planning Workshop  
November 16 and 17, 2004**



Alcan and APM-BC ▶

Context ▶

Alcan-Haisla Nation relationship ▶

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EHS Structure ▶

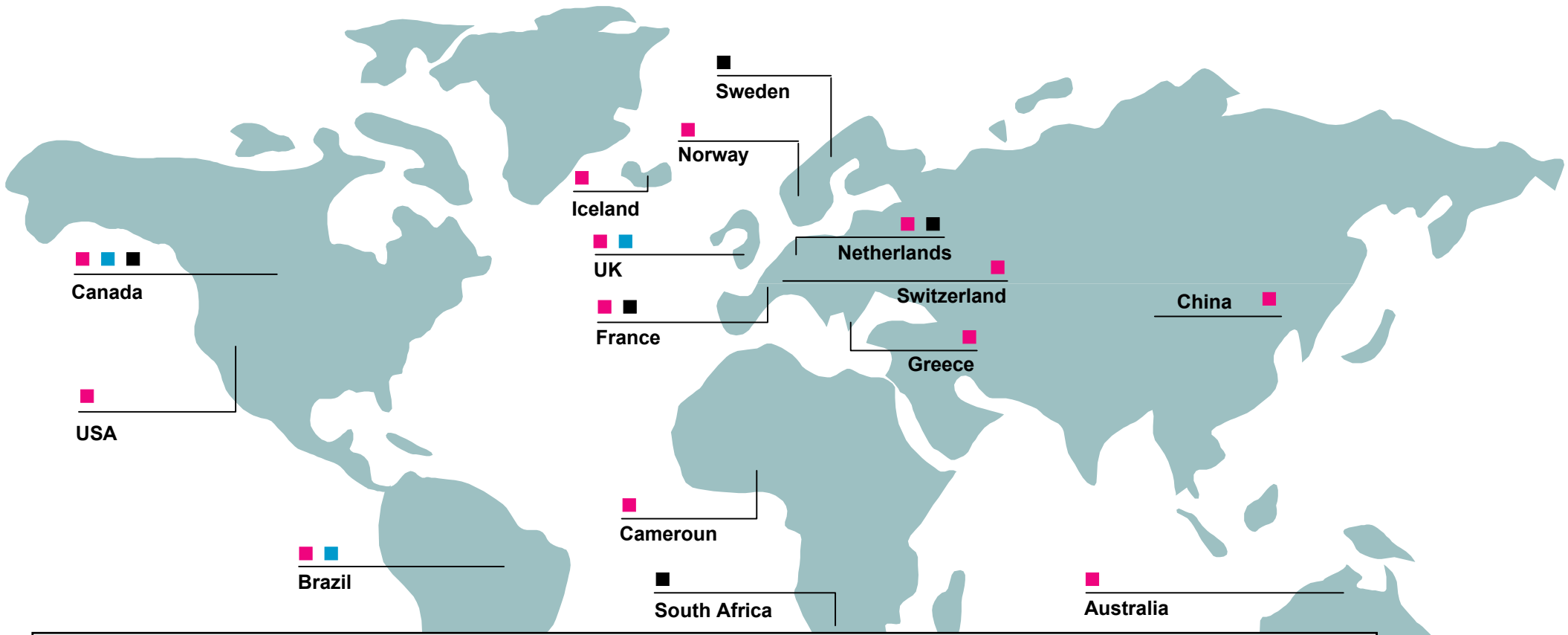
Policy and Vision ▶

APMG 5 years Strategic Plan ▶

EHS First program ▶

# APMG Global Presence

20K employees, US\$ 8 billion in sales revenues



**SMELTING - TOTAL:**

**3,513 mt** ■

- Canada**
  - Arvida (248 kt)
  - Alma (400 kt)
  - Beauharnois (50 kt)
  - Bécancour - 25% (400 kt)
  - Grande Baie (196 kt)
  - Kitimat (277 kt)
  - Laterrière (219 kt)
  - Shawinigan (91 kt)
  - Alouette\* - 40% (243 kt)

- Australia**
  - Tomago - 51.1% (470 kt)
- Brazil**
  - Aratu (58 kt)
  - Ouro Preto (51 kt)
- U.S.**
  - Sebree (196 kt)
- UK**
  - Lochaber (40 kt)
  - Lynemouth (164 kt)

- Switzerland**
  - Steg (40 kt)
- Norway**
  - Soeral - 50% (132 kt)
- Iceland**
  - Isal (172 kt)
- Greece**
  - Distomon - 60% (163 kt)

- Cameroun**
  - Edea - 47% (95 kt)
- France**
  - Dunkerque - (245 kt)
  - Lannemezzan (50 kt)
  - St-Jean (132 kt)
- Netherlands**
  - Vlissingen - 85% (192 kt)
- China**
  - QTX - 50% (150kt)

**POWER**

**GENERATION**

**TOTAL: 4132 MW** ■

- Canada**
  - British Columbia (900 MW)
  - Quebec (2700 MW)
- Brazil**
  - Brazil (47 MW)
- UK**
  - Lynemouth (400 MW)

**OTHER** ■

- France**
  - Smelting Tech. Centre
  - Electrometallurgy
- Netherlands**
  - Aluchemie (anode) (64%)
- Norway**
  - Vigelands (50%)
- Sweden**
  - Alufluor (50%)
- Switzerland**
- Canada**
  - Fluoride Research Centre
  - Dubuc
  - Strathcona
- South Africa**
  - Electrometallurgy
- Brazil**
  - Petrocoque (25%)

Confidential

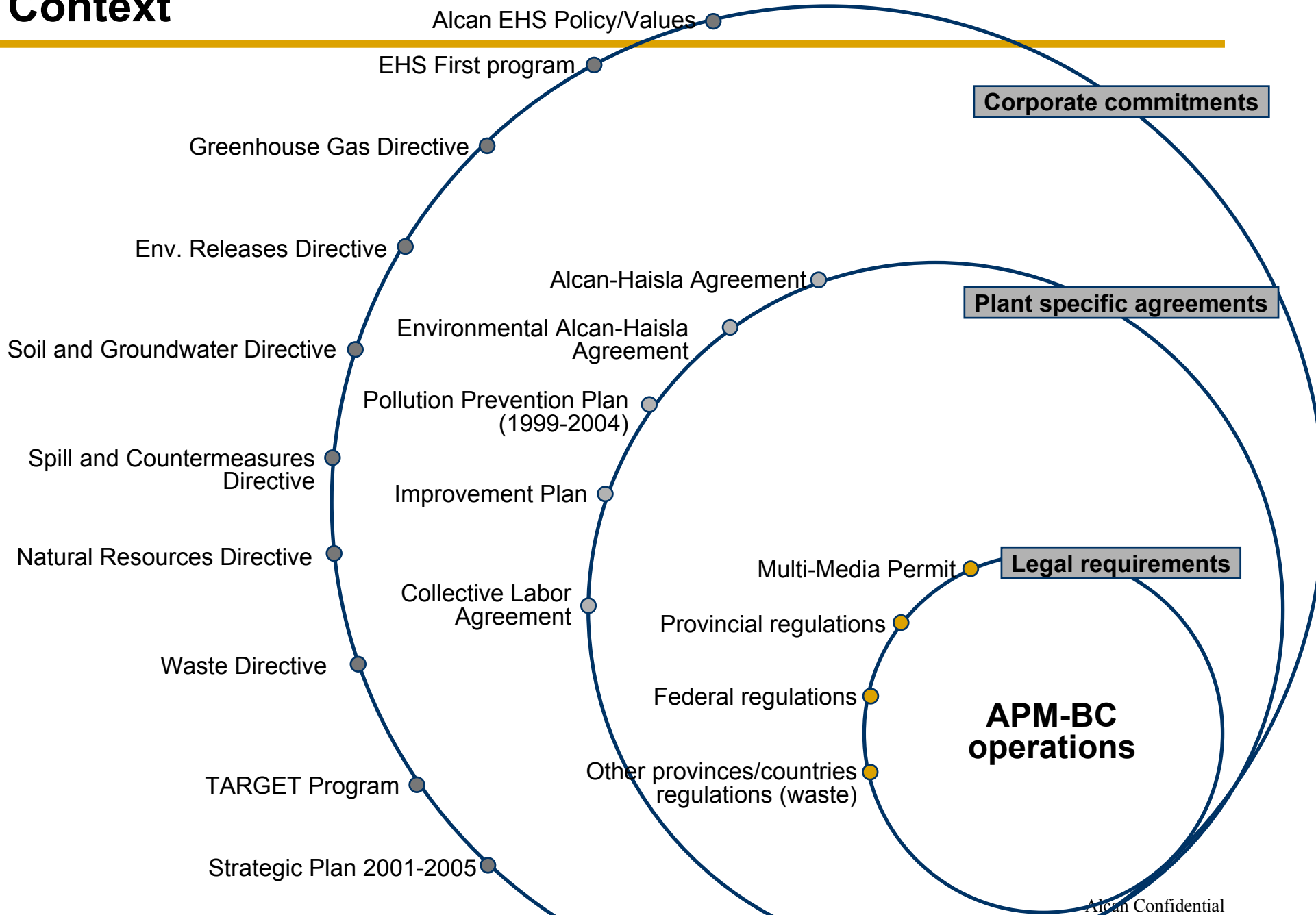
# Alcan and APM-BC

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- Alcan :
  - From Bauxite to Aluminum to finished products
  - Multinational with 2002 revenues of US\$12.5 billion.
  - 54,000 people and has operating facilities in 42 countries.
  
- APM-BC :
  - Part of Alcan Primary Metal Group
  - 1600 employees
  - Production : ingots, billets and energy
  - Operations :
    - Wharf
    - Anode Production
    - Coke Calcining
    - Smelting
    - Casting
    - Reduction Services
    - Maintenance
    - Power operations

# Context

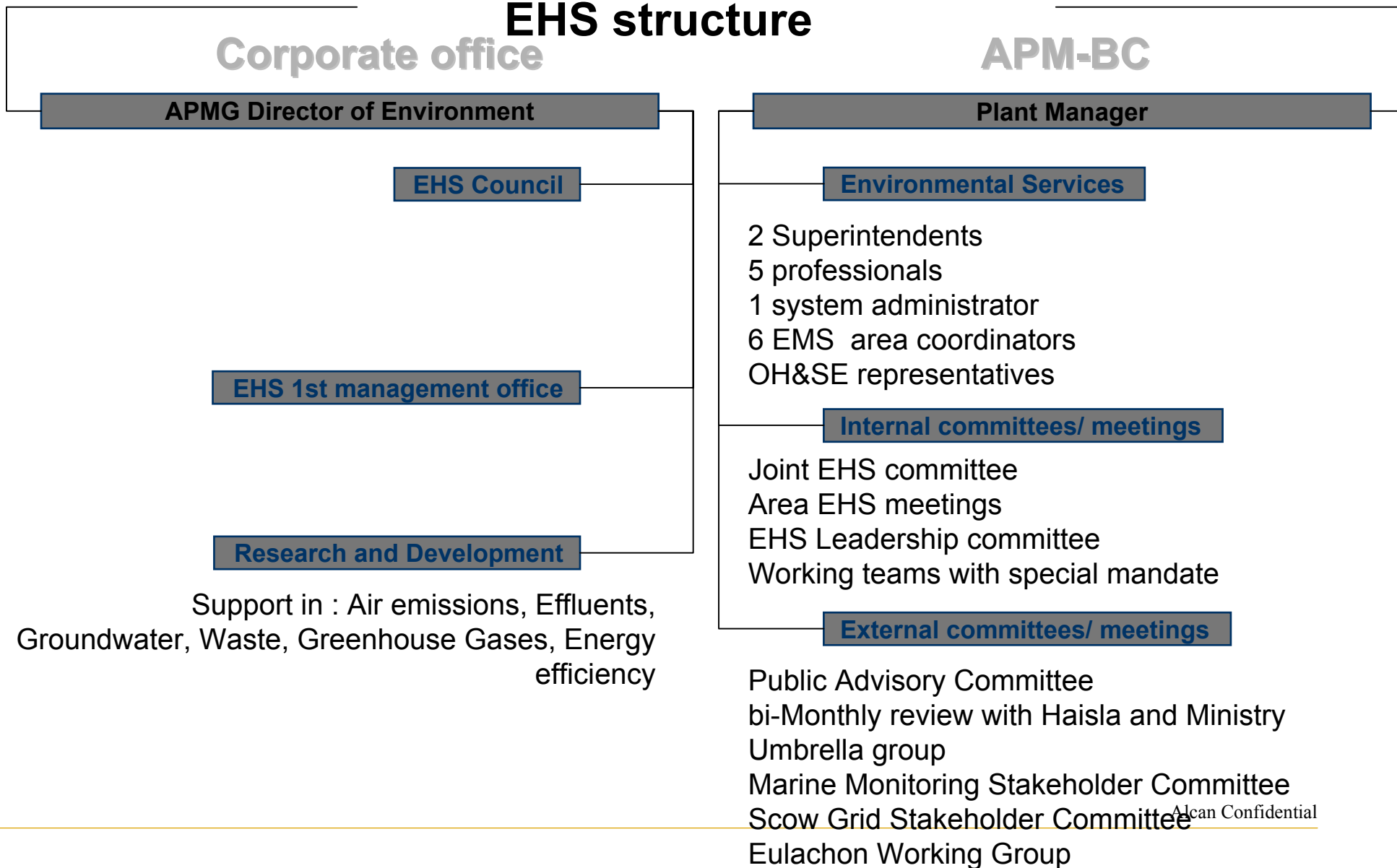


# Haisla First Nations - Alcan Agreement

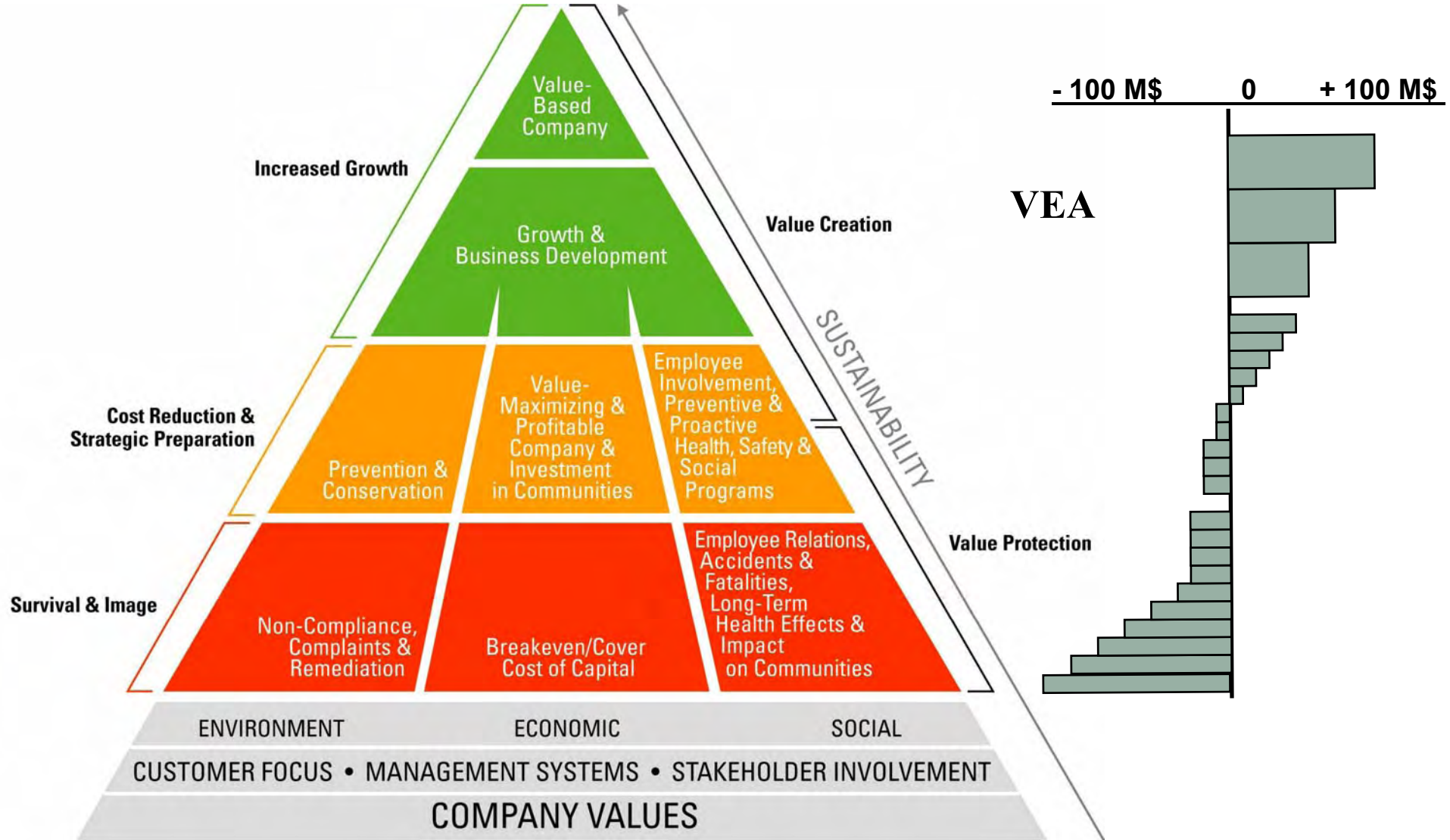
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- “Agreement to develop and sustain a long-term mutually beneficial relationship”
- “This relationship will enable both parties to better achieve their respective goals and resolve conflicts by negotiation and discussion”
- Shared **Values** :
  - Mutual Understanding and Openness
  - Commitment
  - Respect
  - Trust
  - Racial Harmony
  - Patience
- Environment Resource Agreement
  - Creation of Env. Dept in Haisla community
  - Develop capacity within KVC
- Part of a global First-Nations communication program (External Affairs)

# Alcan president EHS structure



# Alcan 's Sustainability Framework



# Alcan Policy & APM-BC commitment

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# Vision

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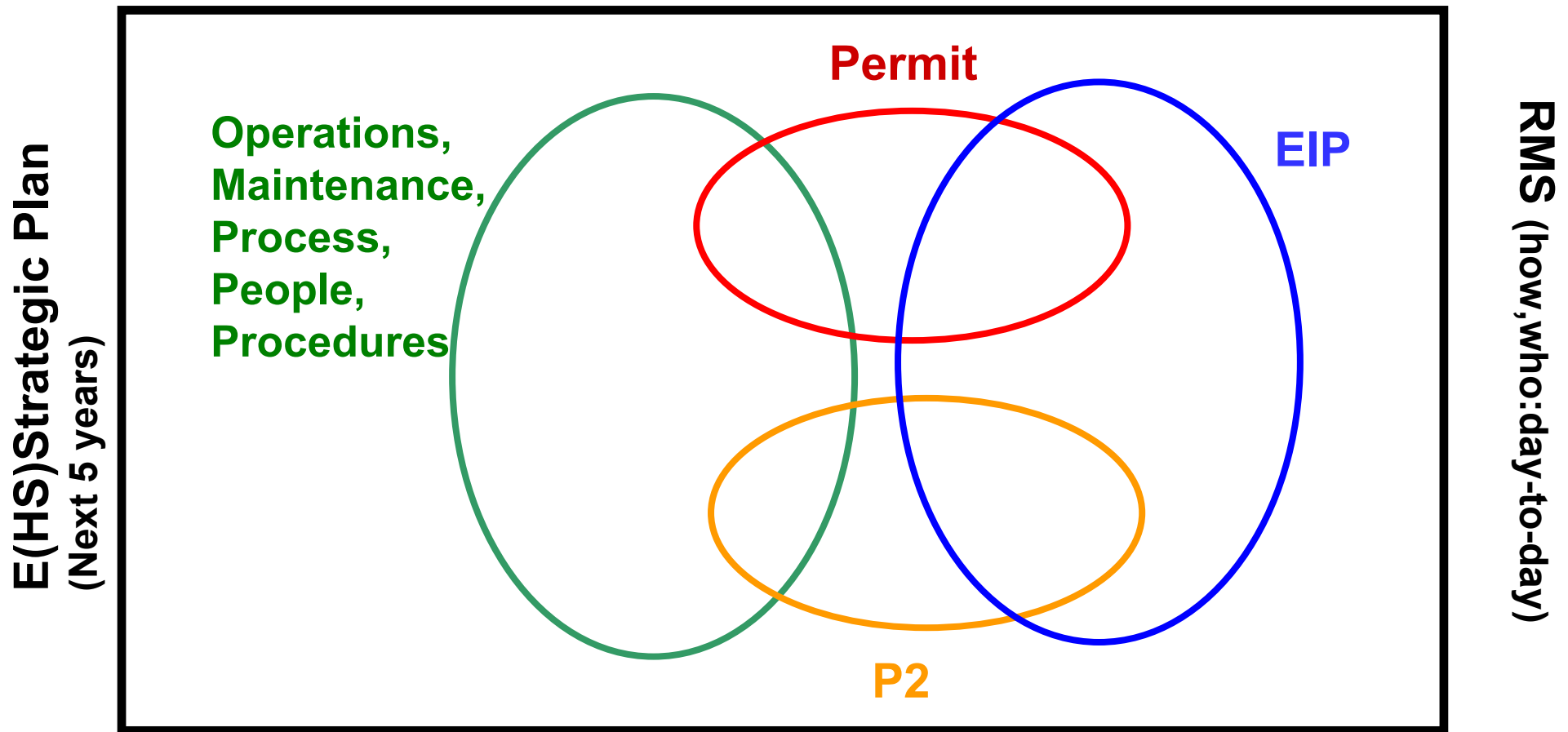
## Input from APM-BC management & EHS partners, 2004 internal workshop

### **Question asked : Where does APM-BC want to be in 5 years?**

- We have to work within the limit and possibilities of our technology
- IAI benchmark
- Priority no1 : compliance
  - Control of process inputs providing less variation (consistency)
- Sustainable goals, targets and results (through the years)
  - Recent reorganization in APM-BC support priorities
- Need to be proactive vs upcoming legislation
- Need to take stakeholders input into account and communicate
- Demonstrate CI in environmental aspects, targeting reduction at the Source to PREVENT pollution
- Promote line/employee ownership of environmental Performance
- Integration of P2 into RMS and EHS strategic plan

# Integration of the Pollution Prevention Plan

Where does the P2 plan fit with the other initiatives?



# How are Priorities defined?

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- Slide on CI - Voice of Environment

Alcan and APM-BC ▶

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EHS Structure ▶

Policy and Vision ▶

**APMG 5 years Strategic Plan ▶**

EHS First program ▶

# Guiding Principles of APMG 5yrs Strategic Plan

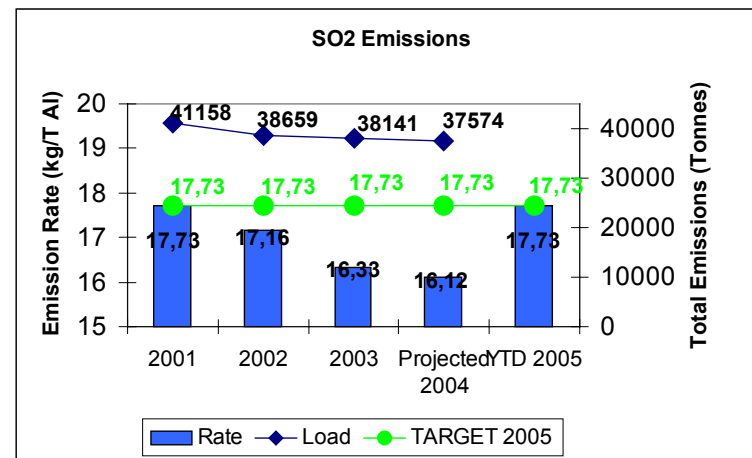
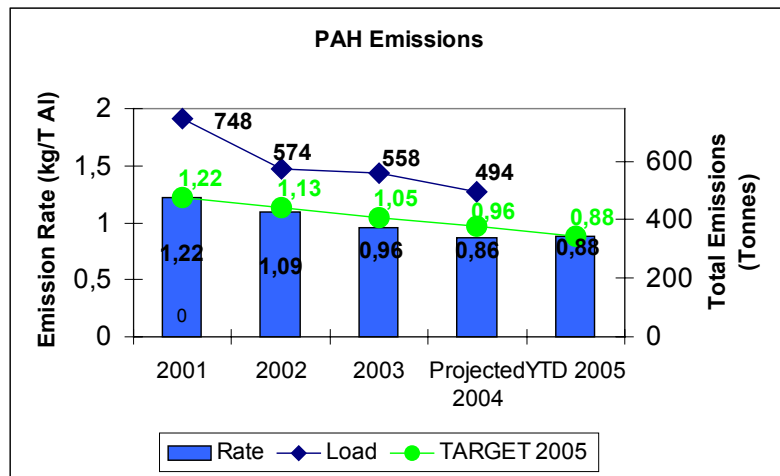
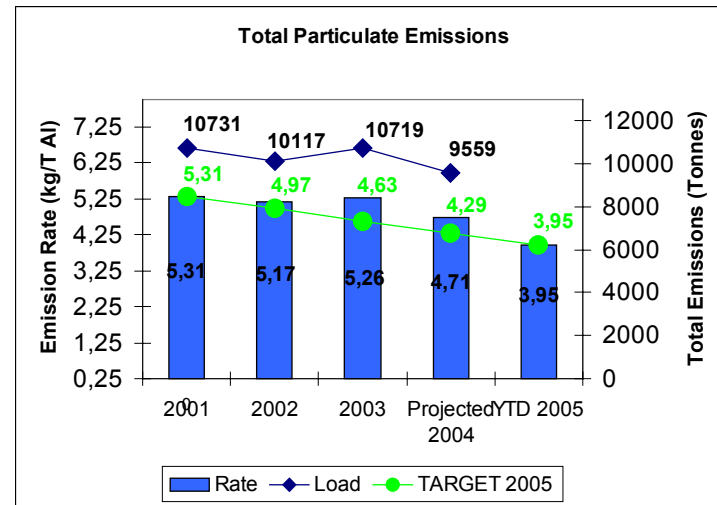
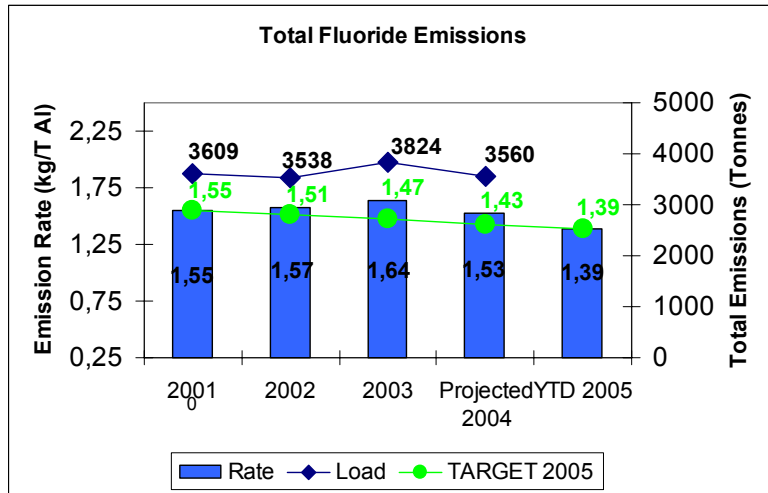
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The strategic plan is based on the following guiding principles:

- **Translating Alcan's vision and policies into actions and results**
- **Aligning with APMG 5 Years Business Plan**
- **Supporting sustainable approaches and principles**
- **Increasing Employee involvement in EHS**
- **Developing a learning organization**
- **Striving to be leaders in EHS...*"leaving (the workplace, environment) better than when we arrived"...***

# APMG Environmental Performance Indicators

APMG continues to implement the environmental strategy plan and increased efforts to be placed on Fluorides and Particulates



# APMG Major risks and impacts

The major risks identified in the 5 yrs strategic plan are :

- Key business risks and impacts
  - Energy/GHG
  - Water (Quality/quantity)
  - Maintaining the focus on *EHS FIRST* system and mindset
  - Integration with Alcan Business system (VBM,CI)
  - Increasing (?) gap between the *talk* and the *walk*
  
- Remaining important risks and impacts to be addressed:
  - **Increasing EHS standards** ( e.g. Housekeeping)
  - Psycho-social /Shift work / Work life balance/overtime
  - Aging workforce
  
- Remaining important risks and impacts to be addressed:
  - Impacts of growth on Environment (loading, uncertainty )
  - Future smelters (size, impacts)
  - Closures/Liabilities (eg soil contamination, land) & remediation
  - Deterioration of raw material quality (impacts on emissions...)
  - SPL treatment
  - Chemical/physical hazards ? (perception vs. real)
  - Public perception of risk
  - Potential for disasters (Sevesso)

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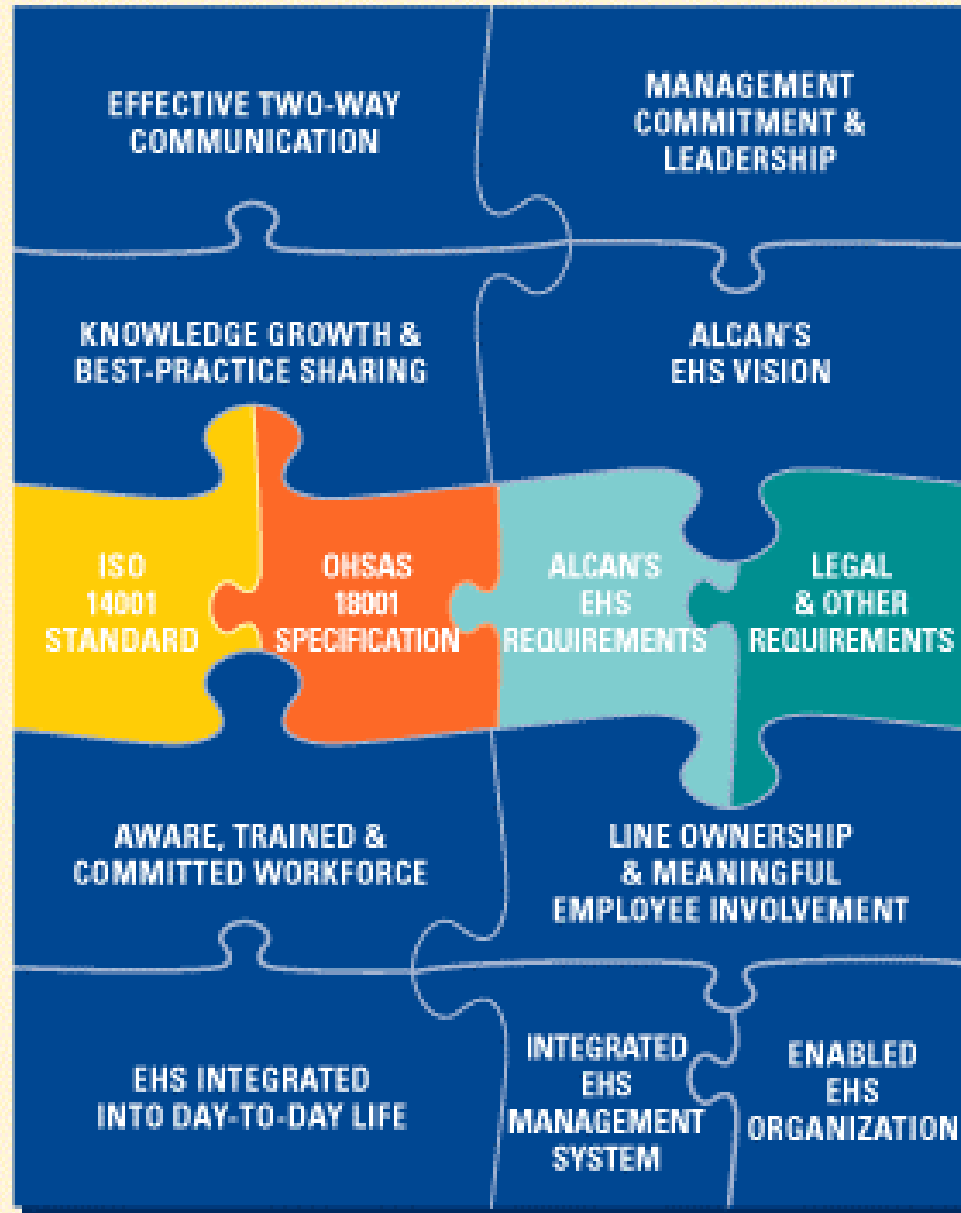
**EHS First program ▶**

# Alcan EHS First Program

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- Paving the Way for World-class Performance in EHS
- “**EHS FIRST** is not only a system; it represents an attitude, a mindset and an acceptance of responsibility and accountability,”
- Common foundation for world-class EHS performance at every Alcan site.
- Builds on EHS best practices and capabilities from both Alcan and third parties.
- It outlines the key EHS requirements, roles and responsibilities to be consistently applied across all business groups.
- Integrates ISO 14001 and OHSAS 18001
- « Soft issues » will make the difference :
  - Leadership
  - Line ownership
  - Communication/training
  - Employee involvement

# ALCAN'S EHS MANAGEMENT SYSTEM





# Commitment

We will not realize the step changes we are looking for unless we demonstrate commitment.

## MY EHS COMMITMENT

IN WORK AS IN LIFE, COMMITMENT PAVES THE WAY FOR ACTION AND HELPS SHAPE THE FUTURE. WHEN WE MAKE A COMMITMENT AND ALIGN OUR ACTIONS WITH IT, WE EMPOWER OURSELVES AND, BY EXTENSION, THOSE AROUND US.

The *EHS FIRST* system is about making and keeping our EHS commitments. When each of us practices this, Alcan will achieve EHS excellence. As we work together to fulfil our vision, this statement of commitment serves to guide our planning, decisions, actions and behaviour.

### I COMMIT TO:

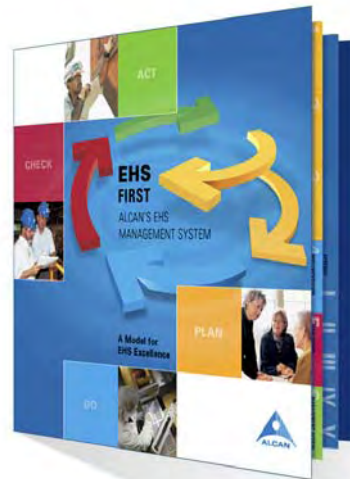
- Make EHS a primary focus, a way of life, and inspire my co-workers to do the same by adopting attitudes and actions geared to achieving EHS excellence;
- Operate from the principle that all EHS incidents can be prevented, and that quality, productivity, profitability and EHS excellence are mutually supportive objectives;
- Strive to make EHS an integral part of every job, program and process, and to ensure we "do it right the first time";
- Become a passionate EHS believer and leader by visibly and actively promoting and driving EHS excellence at work, and supporting EHS activities in my community; and
- Walk the talk, lead by example, and respect my EHS obligations.

_____ Signature — President and CEO	_____ Date
_____ Signatures — Office of the President	_____ Date
_____ Signature — Business Group President	_____ Date
_____ Signature — Sector President/Business Unit Leader	_____ Date
_____ Signature — Site Manager	_____ Date

# Context

10 environment related one pagers reviewed

CLEAR *UNAMBIGUOUS* REQUIREMENTS  
AND PROCESSES WHICH FACILITATE  
RAPID INTERPRETATION AND ACCEPTANCE  
WITHIN THE ORGANIZATION



- | **Six (6) environment specific “hard topic” one pagers**
  - Environmental release management
  - Resource management
  - Spill management and countermeasures
  - GHG management
  - Waste management
  - Sites under management
- | **Four (4) one pagers in measurement section with significant environmental content**
  - Performance monitoring and measuring
  - EH&S Events classification, investigation and analysis process
  - Non-conformances and preventive and corrective action process
  - Audit systems

# Strategic Plans.....

## Corporate indicators and *EHS FIRST*



Six (6) environment specific “hard topic” directives

Four (4) directives in measurement section with significant environmental content

### EHS FIRST ENV. directives

- Performance monitoring and measuring
- EH&S Events classification, investigation and analysis process
- Non-conformances and preventive and corrective action process

- Minor incidents
- Major Incidents
- Non-compliances

■ TARGET - GHG emissions

- GHG management

■ Energy conservation

■ Water consumption

- Resource management

■ Other EPI's (PAH,Ft,SO2,PM...)

- Environmental release management

■ Waste generation

- Waste management

■ Sites under management

- Sites under management
- Spill mangement and coutermeasures

■ Management systems and compliance audits

- Audit systems/ISO 14001

