

# Chilean Mining Commission Conference on Sustainability of the Extractive Mining Industry: the Case of Climate Change

John Drexhage, Director  
Santiago, Chile April 24th, 2012



# What Will Be Covered

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- Introduction to ICMM and its Climate Change Program
- What has been accomplished
- The global climate change picture
- Conclusions

# About ICMM



**CEO led**

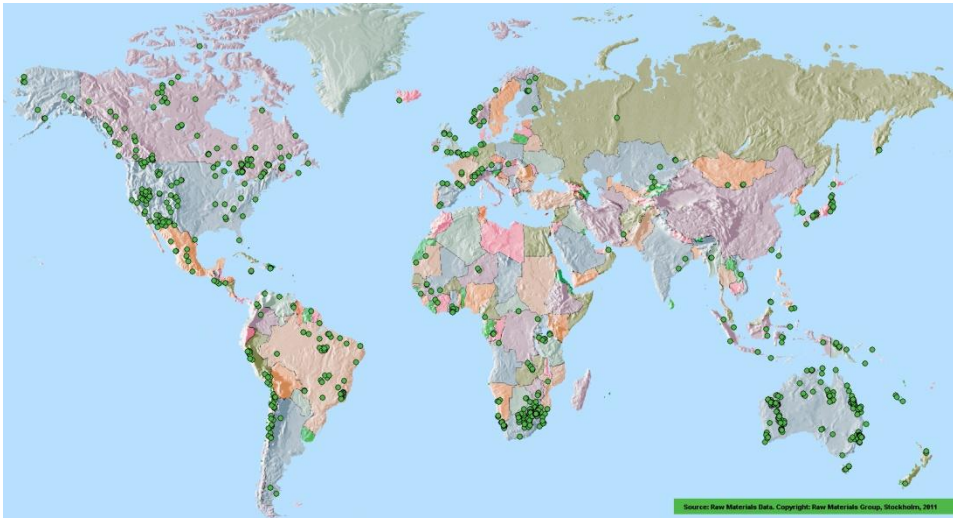
**21  
Company  
members**

**31**

**Association  
members**

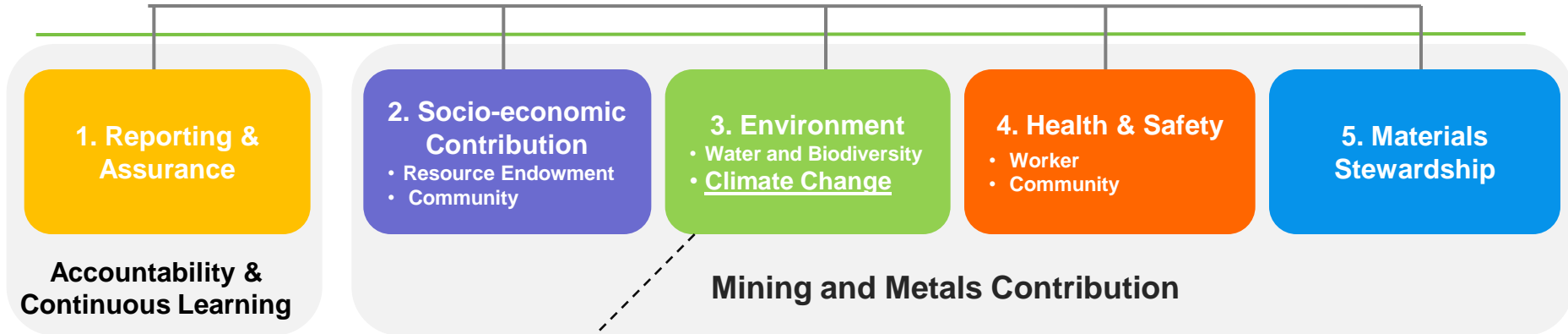


**Over 800 sites in 62 countries**



- Climate change
- Environmental stewardship
- Health & safety
- Materials stewardship
- Social & economic development
- Communications

# Climate Change Program



**Climate Change Program consists of three elements**

- Member company commitments
- Three focus areas
- CEO designed principles for climate policy design.

# Barcelona Mandate

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- Principles for climate policy design
- Member commitments
- Thought leadership areas

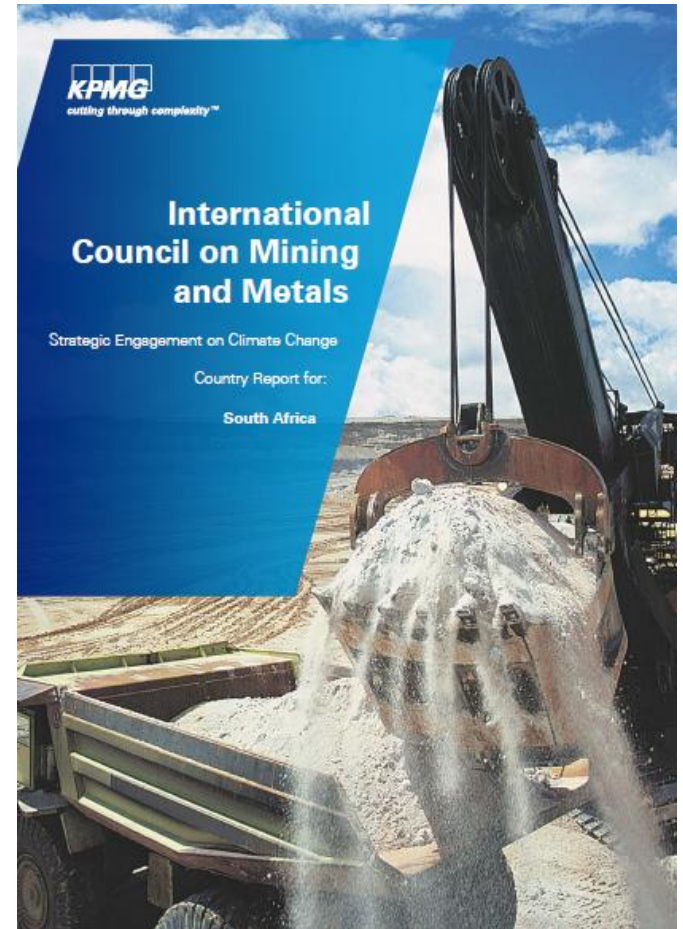


# What we have been up to the last year – strategic engagement

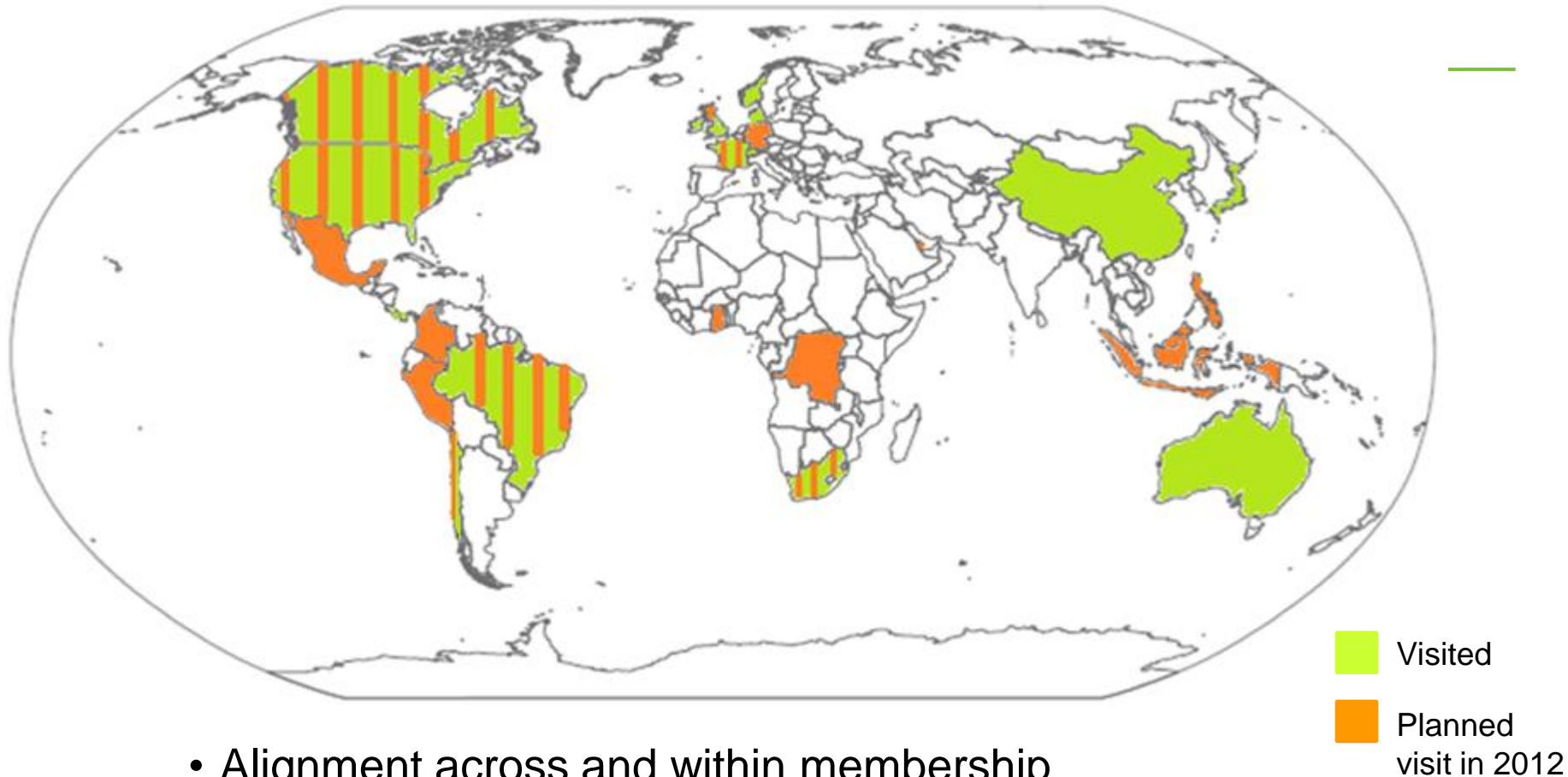
## Baseline Perception Study



## KPMG Country studies



# What we've been up to - Bilaterals



- Alignment across and within membership
- Reporting on national/regional/international actions
- 'Listening post' on messages to policy makers
- Connect the mining world with the policymakers.

# What we've been up to - relationship management

Government	<ul style="list-style-type: none"><li>• Australia, EU, Brazil, China, North America, South Africa, Chile</li></ul>
Multilateral Forums	<ul style="list-style-type: none"><li>• UNFCCC, OECD, IEA, IMO, Global Compact, WEF Mining Group</li></ul>
Education and research	<ul style="list-style-type: none"><li>• ERM, IISD, KPMG, Monitor, RFF, Climate Strategies, TERI</li></ul>
Media	<ul style="list-style-type: none"><li>• Carbon finance, Climate L, IISD reporting services, Mining environment management, Mining journal, Environmental Finance, Climate TV</li></ul>
Mining and Metals Industry	<ul style="list-style-type: none"><li>• ICMM Members and Associations; World Steel Association</li></ul>
Other Industry	<ul style="list-style-type: none"><li>• CSI, IPIECA, ICCA</li></ul>
Finance	<ul style="list-style-type: none"><li>• F&amp;C Investment; IFC; World Bank</li></ul>
Business professional associations and unions	<ul style="list-style-type: none"><li>• BASD, Carbon Trust, ICC, IETA, The Climate Group and WBC</li></ul>
Non governmental and advocacy organisations	<ul style="list-style-type: none"><li>• The Nature's Conservancy, VCS, WRI, WWF and Greenpeace</li></ul>



# What we've been up to - Work Programs

## WG 1: National policies & competitiveness

ICMM  
International Council  
on Mining & Metals

InBrief

Competitiveness implications  
for mining and metals

Climate Change  
November 2011



## WG 2: Land use & adaptation

ICMM  
International Council  
on Mining & Metals

InBrief

The role of mining and metals  
in land use and adaptation

Climate Change  
November 2011



## WG 3: Measurement, reporting & verification

ICMM  
International Council  
on Mining & Metals

InBrief

Measurement, reporting and  
verification and the mining  
and metals industry

Climate Change  
November 2011



# International policy landscape: UNFCCC

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**COP17/CMP7**  
**UNITED NATIONS**  
CLIMATE CHANGE CONFERENCE 2011  
**DURBAN, SOUTH AFRICA**

- Agreement on a **new global regime by 2020**
- Move towards **more coherent measurement, reporting and verification** of climate commitments.
- Likely new modes of **collaboration with the private sector** around **finance** and **implementing** climate change agreements

# International policy landscape: emerging trends

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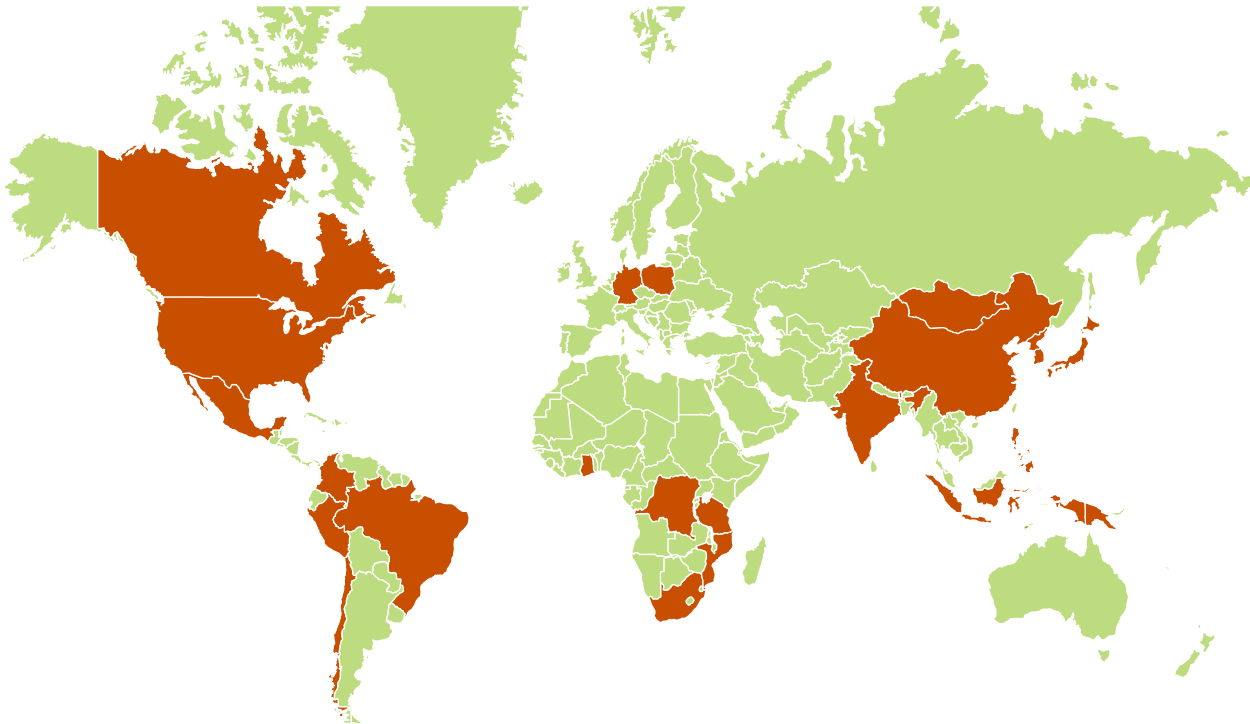
- It's more than just the UNFCCC
- Re-emergence of discussion around **sectoral approaches**
- Concerns around **Border Tax Adjustments** as a form of “eco-imperialism”.
- Progress on developing **new market mechanisms**.



Carbon Finance Unit  
THE WORLD BANK

# Eight key drivers define the impact of climate related policy on the industry

*Analysis of 22 countries identified eight key drivers related to climate related policy that have a significant impact on the mining and metals industry.*



GHG emissions profile

Climate related PAMs  
(Policies and Measures)

Surrogate PAMs

NAMAs

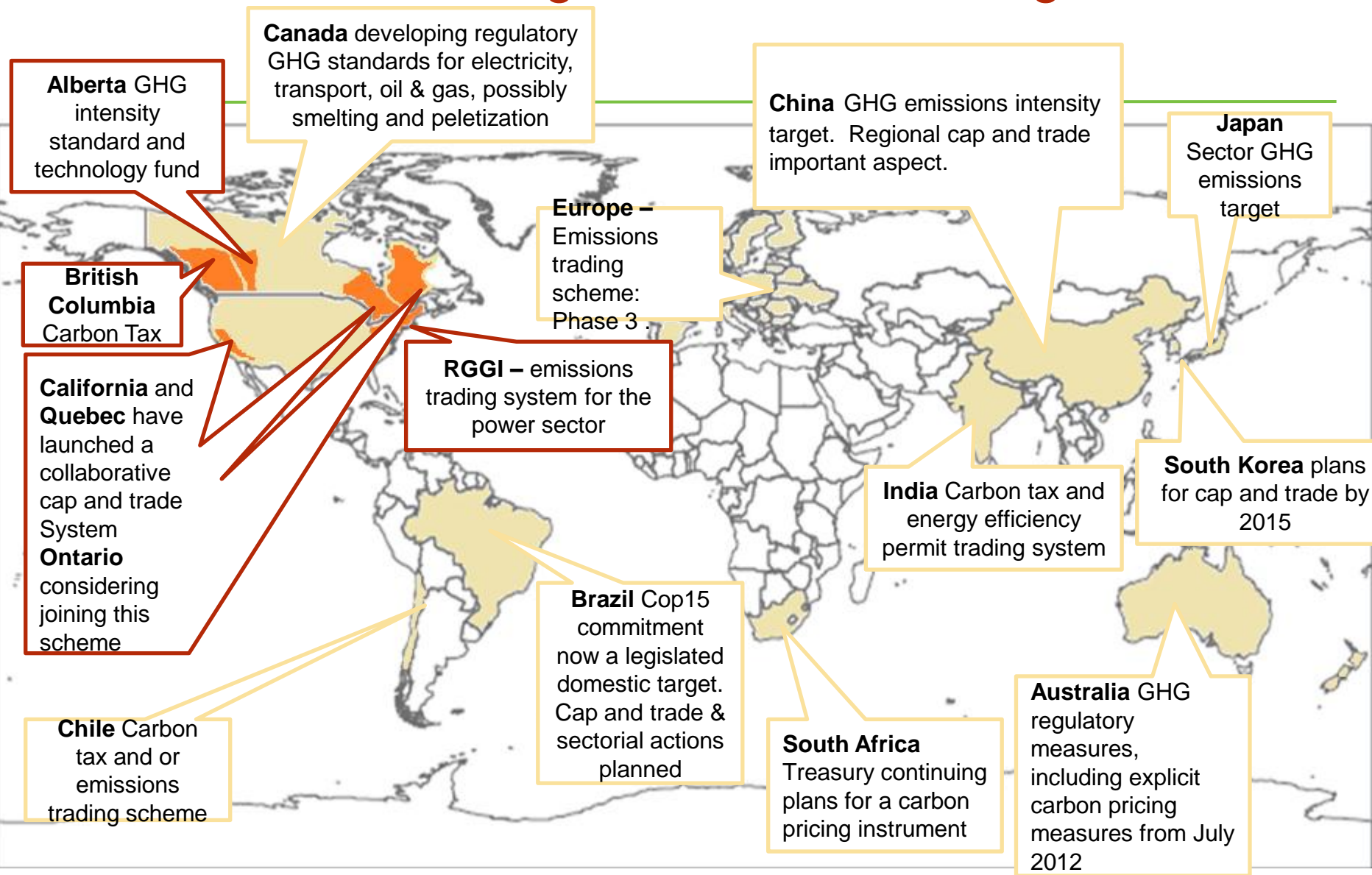
Physical exposure

Governance structures

Dialogue (public - private)

Industry public perception

# Global Climate Change Picture: Direct regulations



# Climate related PAMs will influence the industry...

...by creating carbon cost differentials, increasing cost of compliance and providing financial incentives to manage cost and ensure security of supply.

Investment decisions will be impacted by domestic regulation and a carbon price.

## Tanzania: REDD+

- Secure offsets
- Land-use conflicts (conservations vs. mining)

## Chile: PMR

- Increase input costs
- Increase MRV requirements

## India: Clean Energy Fund

- Develop renewable energy – manage cost, emissions and security of supply

## North America

- Carbon pricing
- RE incentives
- Tax on fossil fuels

## Central and Latin America

- RE targets
- RE tax incentives
- PMR
- REDD

## Africa

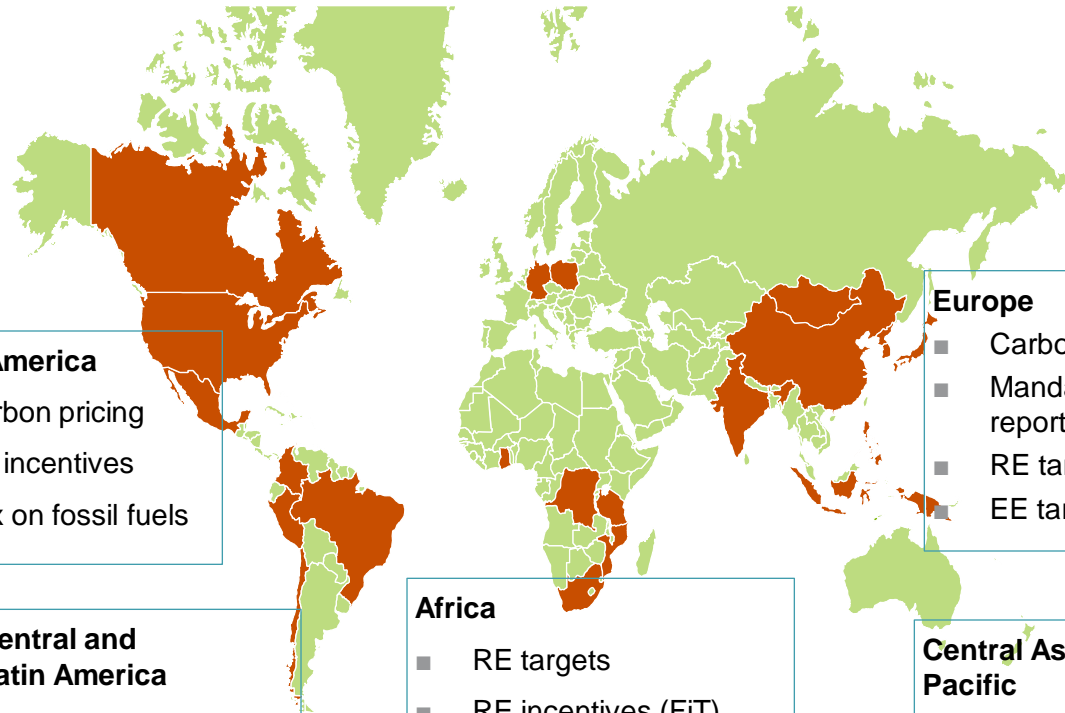
- RE targets
- RE incentives (FiT)
- Power capacity
- REDD
- Carbon pricing (SA)

## Europe

- Carbon pricing
- Mandatory GHG reporting
- RE targets
- EE targets

## Central Asia and Pacific

- Carbon pricing
- Clean coal
- EE credit schemes
- REDD





Global Top 15 Issues	NA	SA	Asia	Europe
01: Energy				
02: Climate				
03: Air Pollution				
04: Economic Recession				
05: Water Pollution				
06: Unemployment				
07: Design for Sustainability				
08: Emerging Markets				
09: Waste				
10: Biotechnology				
11: Life Cycle Thinking				
12: Sust Product & Consumption				
13: Ethical Governance				
14: Land Use				
15: Environmental Incidents				

Source  
BASF &  
Five  
Winds



# Key findings

- Despite the absence of a binding international agreement, actions are taking place at the national level
- Countries prepare low carbon strategies
- Embed strategies into national legislation

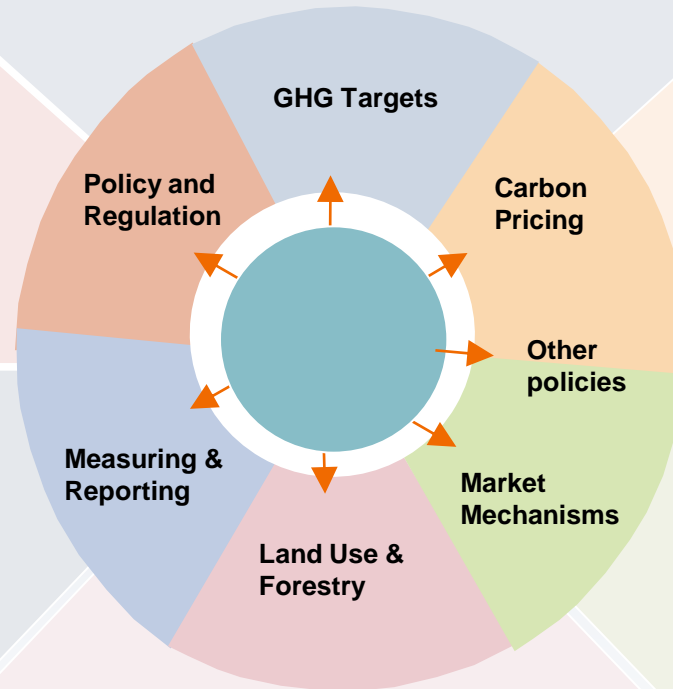
- Countries introduce GHG related emission reduction targets

- Carbon pricing – key implementation instrument
- Cap and trade schemes in progress (e.g. SK, Japan, SA, Australia)
- Concerns on carbon leakage and fungibility between schemes

- Mining and metal emissions unknown
- Achieving consistency in measuring emissions is challenging
- Trend towards harmonising MRV requirements in international negotiations

- Efforts to reduce emissions from the sector
- Develop REDD+ projects to secure offsets
- Land use conflicts (conservation vs. mining)

- Energy efficiency schemes
- Renewable energy incentives
- Market mechanisms to continue
- Effective abatement technology adoption can lead to competitive advantage



# Four broad categories of response but not all policies have the same flexibility for compliance

**Reduce operational emissions**

**Trade carbon allowances**

**Invest in offset projects**

**Pay compliance fee**

## Examples

Energy efficiency, low carbon technologies, renewables, off-grid power.

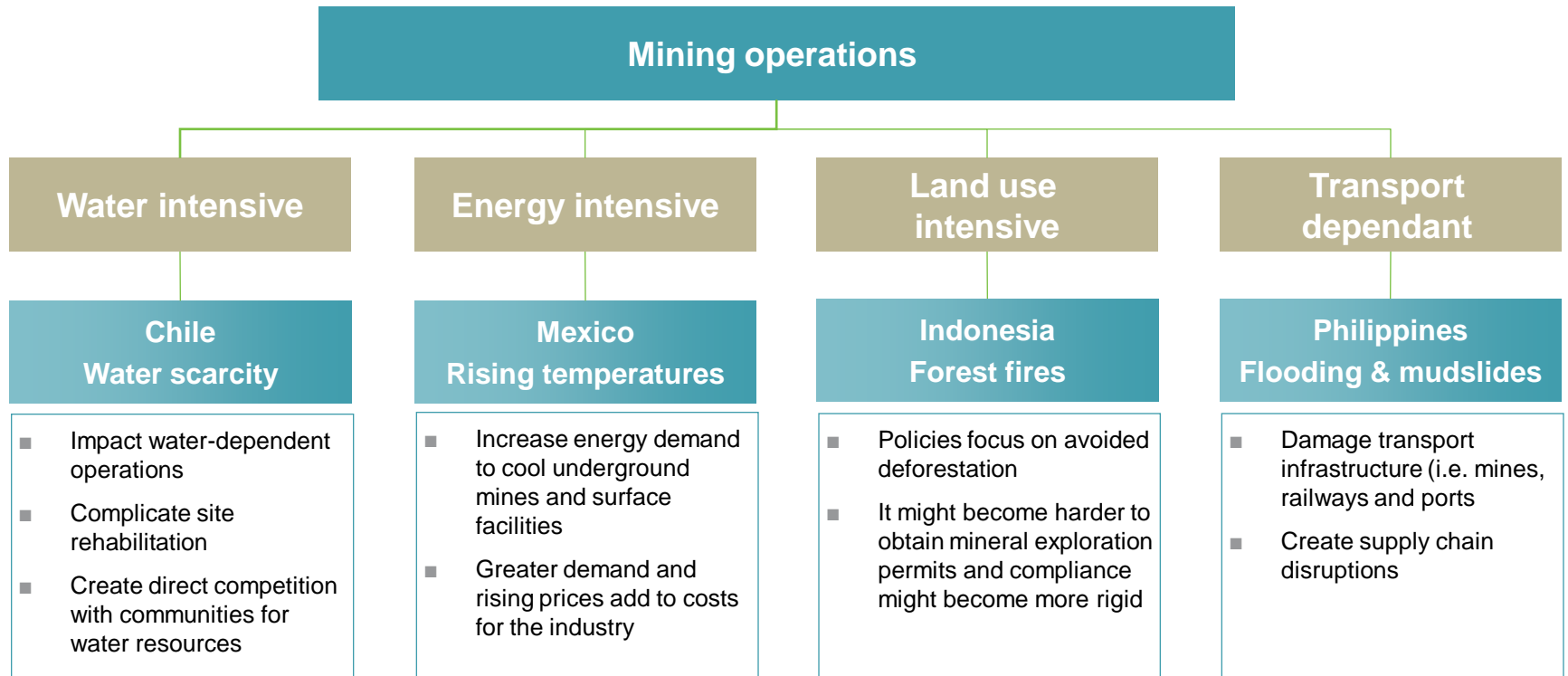
European Union Allowance, New Zealand Unit

CDM, JI, Voluntary offsets, carbon sequestration

Tax, purchase credits at auction

# Exposure of mining operations to physical impacts is potentially high...

...climate change has the potential to exacerbate existing physical and geographical challenges faced by the mining and metals industry. Companies should consider these challenges in their investments.



# The anticipated impacts of a changing climate presents both risks (and opportunities)

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The exact nature of the impact will be region specific. Huge complexity for mining firms to understand and latterly manage risks associated with changes in the climate.

## Six categories of impacts identified from CDP responses

1. disturbance to mine infrastructure and operations
2. changing access to supply chains and distribution routes
3. challenges to worker health and safety conditions
4. challenges to environmental management and mitigation
5. more pressure points with community relations
6. exploration & future growth.

*Source: BSR*

# Conclusion:

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While climate may not be as extensively covered by the global media as in the lead up to Copenhagen, actions at the domestic/local level, are on the rise, particularly in rapidly maturing developing economies:

- Attractive fiscal instrument for treasury branches in major developing economies
- Energy security:
  - Subsidy reform
  - Energy access for all
  - Low(er) carbon fuel switching options
  - Energy efficiency (even at the consumer level)
- Local health issues (air and water)
- Durban represents a new start: the international regime (whether de facto or de jure and inside or outside the UNFCCC) will set the parameters/rules for the scope of domestic implementation

# Muchos Gracias

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