

Emissions Trading Implications and Opportunities for Mining

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 **Stratos**
strategies to sustainability

 A Carbon Neutral Company[®]

Presentation Overview

- Background
- Kyoto Mechanisms
- Carbon Markets
- Opportunities
- Challenges
- Resources

Stratos is...

- We are a values-based, multi-disciplinary consultancy serving businesses, governments and international institutions.
- We help companies and industrial sectors understand and act on corporate responsibility and sustainability through our expertise in:
 - Corporate Strategies and Management Systems
 - Non-financial Risk Management
 - Performance Measurement
 - Corporate Sustainability Reporting
 - Stakeholder Engagement
 - Industry Codes and Voluntary Initiatives

The Road to...

- 1992 - United Nations Framework Convention on Climate Change (UNFCCC)
- 1994 - *National Action Plan on Climate Change*
- 1997 - Kyoto Protocol
- 1998 - *National Climate Change Process*
- 2000 - *National Implementation Strategy*
- 2000 - *Action Plan 2000 on Climate Change*
- 2002
 - *Discussion Paper on Canada's Contribution to Addressing Climate Change*
 - *Climate Change Plan for Canada*
 - Canada Ratifies
- 2005
 - Kyoto Comes into Force
 - *Moving Forward on Climate Change*
 - Montreal COP/MOP
- 2006 - Newly elected Government - *"Made in Canada" Approach*

Annex B Countries

Kyoto Protocol

Countries included in Annex B to the Kyoto Protocol and their emissions targets

Country	Target (1990** - 2008/2012)
EU-15*, Bulgaria, Czech Republic, Estonia, Latvia, Liechtenstein, Lithuania, Monaco, Romania, Slovakia, Slovenia, Switzerland	-8%
US***	-7%
Canada, Hungary, Japan, Poland	-6%
Croatia	-5%
New Zealand, Russian Federation, Ukraine	0
Norway	+1%
Australia	+8%
Iceland	+10%

* The EU's 15 member States will redistribute their targets among themselves, taking advantage of a scheme under the Protocol known as a "bubble". The EU has already reached agreement on how its targets will be redistributed.

** Some EITs have a baseline other than 1990.

*** The US has indicated its intention not to ratify the Kyoto Protocol.

Source: UNFCC

Kyoto Mechanisms

- International Emissions Trading (IET)
- Clean Development Mechanism (CDM)
- Joint Implementation (JI)

Rationale for Emissions Trading

- Accept a carbon constrained future
- Put a price on carbon emissions
- Harness market opportunities to achieve targets in most cost-effective and flexible way

Markets

Kyoto markets

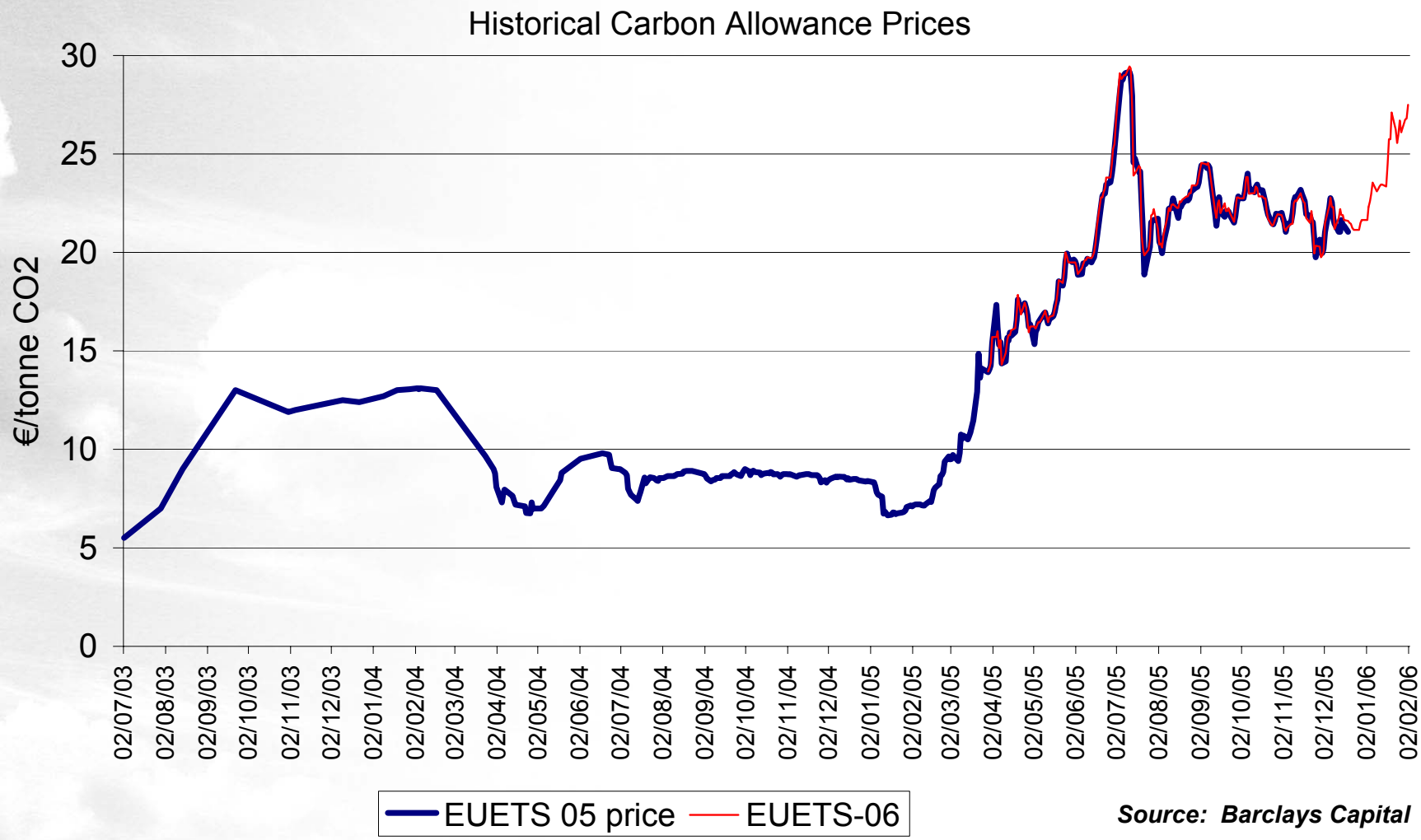
- European Union Emissions Trading Scheme (EU ETS) -EU Allowances (EUAs)
- CDM - Certified Emission Reductions (CERs)
- JI - Emission Reduction Units (ERUs)
- Assigned Amount Units (AAUs)

Non-Kyoto markets

- Chicago Climate Exchange
 - Voluntary and self-regulating
- US state initiatives
 - Regional Greenhouse Gas Initiative
 - Oregon Power Plant Offset Program
- New South Wales ETS
- Retail offsets



Historical EUA Prices



Source: Barclays Capital

CDM Market Overview

- 146 registered projects will deliver at least 330 million CERs by 2012
- So far 4,173,719 CERs have been issued
- All projects currently in the pipeline are expected to deliver 800 million CERs by 2012
- 2 “mining projects” - coal bed methane
- 27 methodologies approved
- 8 consolidated methodologies available

Source: IETA

Challenges

- Uncertain policy and regulatory situation in Canada
- CDM
 - Linking CDM projects with EU ETS
 - Sustainability criteria in host countries
 - Cost of project registration
- Lack of energy/GHG management systems

Resources

- World Business Council on Sustainable Development (WBCSD) - GHG Protocol Initiative
- Pew Center on Global Climate Change
- International Institute for Sustainable Development (IISD)
- International Emissions Trading Association
- Canadian Standards Association – GHG Registries
- Mining Association of Canada - Strategic Planning and Action on Climate Change: A Guide for Canadian Mining Companies



Thank You

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