ISO Standards as a Contribution to Global Carbon Regimes (MRV)

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10th Annual Workshop on GHG Trading
EPRI – IEA - IETA
September 21, 2010
Paris, France

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ISO

Introduction

- In the Post Copenhagen World – global carbon regimes not materializing – the **Kyoto model no strength** outside of the EU-Copenhagen Accord if achieved will be a series of agreements – Policy confusion and **fragmentation** – tough challenge for all.
- While the framework agreement is delayed we must proceed to build the **components for the system** especially as MRV will be needed whatever the final system – we must also build from the **region into the global** but we need consistency in MRV between regional units – focus on what we can do today!
- We provide technical building blocks for politicians to create policy (targets, timetables, eligibility, etc).

Introduction (cont)

- In my opinion one of the key components in a **unified approach** to regional systems building will be the **ISO 14,000** series of **voluntary international standards** now promoted by both **ISO and UNEP –** the tools for the system.

- The climate and carbon related “standards” are the focus for this presentation with particular emphasis on their relationship to **measuring, reporting, and verification** (MRV) which is the focus of the panel.

- One of my colleagues, Anne-Marie Warris, Chair of SC-I (Environmental Management Systems – ISO 14001)in our group, will have more specific comment on this panel.

What is ISO?

- **ISO** - the International Organization for Standardization – was established **in 1947** and is based in Geneva, Switzerland - Bretton Woods, and common standards to facilitate **world trade**;
- ISO – a non-governmental organization – is a federation of the **national standards bodies** of 162 countries (one per country) and 500+ international/regional **liaison members**;
- ISO is comprised of **3,000+ technical groups** that develop standards with the broadest possible base of stakeholder groups;
- ISO develops standards by **transparent**, **consensus-based procedures** based on **national input** of **leading professionals** in the field in a **bottom up design process** – national conformity assessment MRV;
- ISO has published **over 17,700 international standards**;
- ISO standards are designed to be **implemented world-wide**

ISO/TC 207 on Environmental Management – A Short History

1991	The World Business Council on Sustainable Development (**WBCSD**) was founded on the eve of the **Rio Earth Summit** to involve business in sustainability issues and give it a voice in the forum. The WBCSD approached ISO to consider the development of **environmental management standards** as a key component in sustainable development.
1992	The **United Nations** Conference on Environment and Development was held in Rio de Janerio. How states and business could deliver on climate change.
1993	ISO established **Technical Committee 207** on Environmental **Management** to develop the **ISO 14000** series of international standards on environmental management. Bottom up vs. Top Down process of the COP's
1995	The World Trade Organisation (**WTO**) supported development of the ISO 14000 series of international standards to "level the playing field" for **international trade agreements** and avoid protectionist barriers.
1996	The **first edition of ISO 14001** was published – **revised every 5 years** – it is the framework environmental management system – 183,000 companies ISO 14001 compliant – largest numbers are China – label on advertising or products – market driven implementation.
2006	First GHG (MRV Standards Published

Working with developing countries…

Technical/Subcommittee		Chair	Vice-Chair	Secretariat
TC	Technical Committee	Canada	Brazil	Canada
SC1	Env. Management Systems	UK	Indonesia	UK
SC2	Env. Auditing	Netherlands	Brazil	Netherlands
SC3	Env. Labelling	Australia	Zimbabwe	Australia
SC4	Env. Performance	USA	Argentina	USA
SC5	Life-cycle Assessment	Germany	Singapore	France
SC7	GHG management	Malaysia	na	Canada / China

Participation – Countries – Nearly 100

Countries Participating in ISO/TC 207

Algeria (IANOR)
Argentina (IRAM)
Armenia (SARM)
Australia (SA)
Austria (ON)
Barbados (BNSI)
Belgium (NBN)
Brazil (ABNT)
Bulgaria (BDS)
Canada (SCC)
Chile (INN)
China (SAC)
Colombia (ICONTEC)
Costa Rica (INTECO)
Cuba (NC)
Czech Republic (UNMZ)
Côte-d'Ivoire (CODINORM)
Denmark (DS)
Ecuador (INEN)
Egypt (EOS)
Finland (SFS)
France (AFNOR)
Germany (DIN)
Ghana (GSB)
Greece (ELOT)
Hungary (MSZT)
India (BIS)
Indonesia (BSN)
Iran, Islamic Republic of (ISIRI)
Iraq (COSQC)
Ireland (NSAI)
Israel (SII)
Italy (UNI)
Jamaica (BSJ)
Japan (JISC)
Kazakhstan (KAZMEMST)
Kenya (KEBS)
Korea, Democratic People's Republic (CSK)
Korea, Republic of (KATS)
Libyan Arab Jamahiriya (LNCSM)
Malaysia (DSM)
Malta (MSA)
Mauritius (MSB)
Mexico (DGN)
Morocco (SNIMA)
Netherlands (NEN)
New Zealand (SNZ)
Norway (SN)
Oman (DGSM)
Pakistan (PSQCA)
Peru (INDECOPI)
Philippines (BPS)
Poland (PKN)
Portugal (IPQ)
Romania (ASRO)
Russian Federation (GOST R)
Saudi Arabia (SASO)
Serbia (ISS)
Singapore (SPRING SG)
South Africa (SABS)
Spain (AENOR)
Sri Lanka (SLSI)
Sweden (SIS)
Switzerland (SNV)
Tanzania, United Republic of (TBS)
Thailand (TISI)
Trinidad and Tobago (TTBS)
Tunisia (INNORPI)
Turkey (TSE)

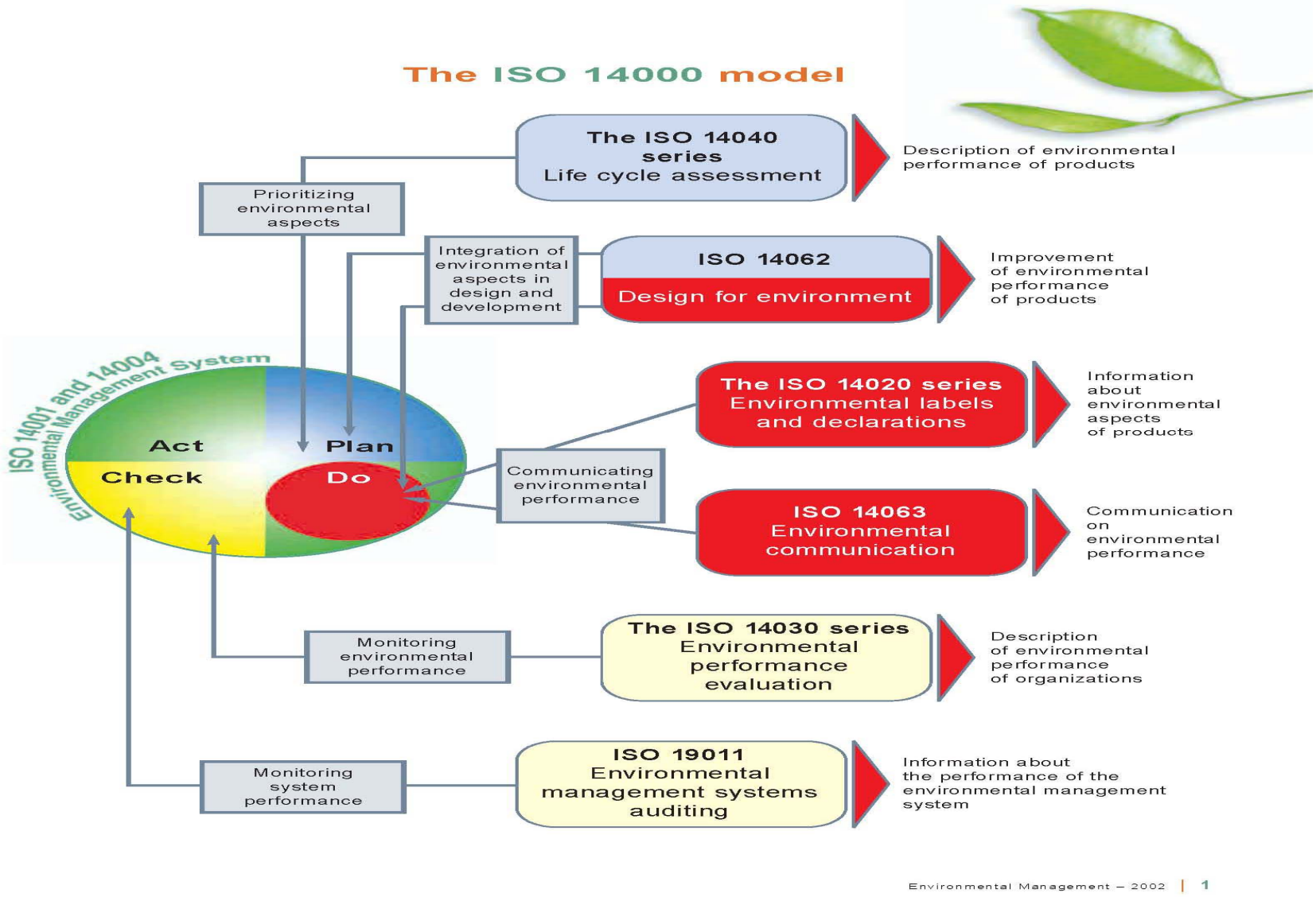
Countries Observing ISO/TC 207 Work

Bangladesh (BSTI)
Belarus (BELST)
Bolivia (IBNORCA)
Bosnia and Herzegovina (BAS)
Botswana (BOBS)
Cameroon (CDNQ)
Congo, The Democratic Republic of the (OCC)
Croatia (HZN)
Estonia (EVS)
Ethiopia (QSAE)
Hong Kong, China (ITCHKSAR)
Iceland (IST)
Jordan (JISM)
Kuwait (KOWSMD)
Lebanon (LIBNOR)
Lithuania (LST)
Moldova, Republic of (INSM)
Mongolia (MASM)
Montenegro (ISME)
Palestine (PSI)
Saint Lucia (SLBS)
Senegal (ASN)
Slovakia (SUTN)
Slovenia (SIST)
Sudan (SSMO)
Swaziland (SWASA)
Yemen (YSMO)
Zimbabwe (SAZ)

Participation – International organizations

ANEC	European Association for the Co-ordination of Consumer Representation in Standardization	ILAC	International Laboratory Accreditation Cooperation
APO	Asian Productivity Organization	INEM	International Network for Environmental Management
CEPI	Confederation of European Paper Industries	INLAC	Latinoamerican Institute for Quality Assurance
CI	Consumers International	IQNet	The International Certification Network
EC	European Commission	ITC	International Trade Centre
ECOLOGIA	ECOlogists Linked for Organizing Grassroots Initiatives	OECD	Organisation for Economic Co-operation and Development
ECOS	European Environmental Citizens Organisation for Standardisation	Sierra Club	Sierra Club
EDF	Environmental Defense Fund	UNCTAD	United Nations Conference on Trade and Development
EEB	European Environmental Bureau	UNEP	United Nations Environment Programme
FIDIC	International Federation of Consulting Engineers	UNFCCC	United Nations Framework Convention on Climate Change
GEN	Global Ecolabelling Network	WBCSD	World Business Council for Sustainable Development
IAF	International Accreditation Forum, Inc.	WFSGI	World Federation of the Sporting Goods Industry
IAI	International Aluminium Institute	WHO	World Health Organization
IAQ	International Academy for Quality	WRI	World Resources Institute
ICC	International Chamber of Commerce	Worldsteel	World Steel Association
IISD	International Institute for Sustainable Development	WTO	World Trade Organization

ISO/TC 207 – Portfolio of Standards – Before MRV for GHG



ISO – GHG/MRV

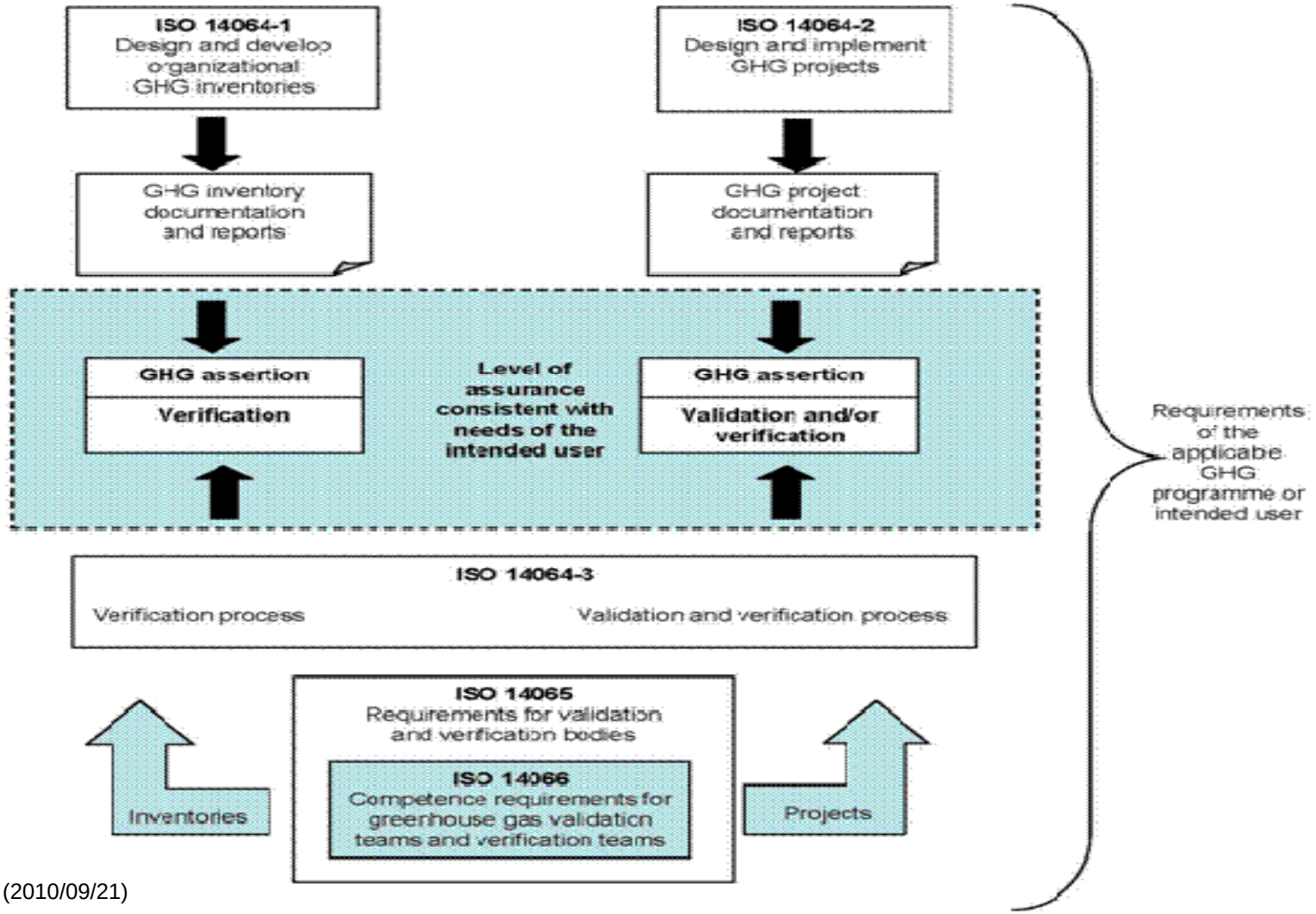
- ISO 14064-1 – Inventories and Reporting for **Organizations.***
- ISO 14064-2 – Inventories and Reporting for **Projects.***
- ISO 14064-3 – **validation** and/or **verification** (consistent with the needs of the user).*
- ISO 14065 – **accreditation** of validation & verification bodies*
- ISO 14066 – **competence** required for validation and verification teams.**
- ISO 14067-1 and 2 **– Carbon Footprint** of Products – coop with WRI.***

*Operational

** Final Approval Stage

*** Underdevelopment

ISO 14064/5/6 Framework



Applications for Regulations & Trading

- The Canadian Standards Association (the Secretariat) has created new registry and process tools to make ISO 14064 (etc) more useful to users and to government regulators.

  A. **Clean Start Registry** – measurement and reporting registry for companies using 5 step simple process to clarify and simplify process of 14064

  B. **Clean Projects Registry** – listing and delisting of GHG projects with verified emission reductions and removals.

  C. **Serialization** – registry tags for each metric tonne following independent verification for use in selling or trading.

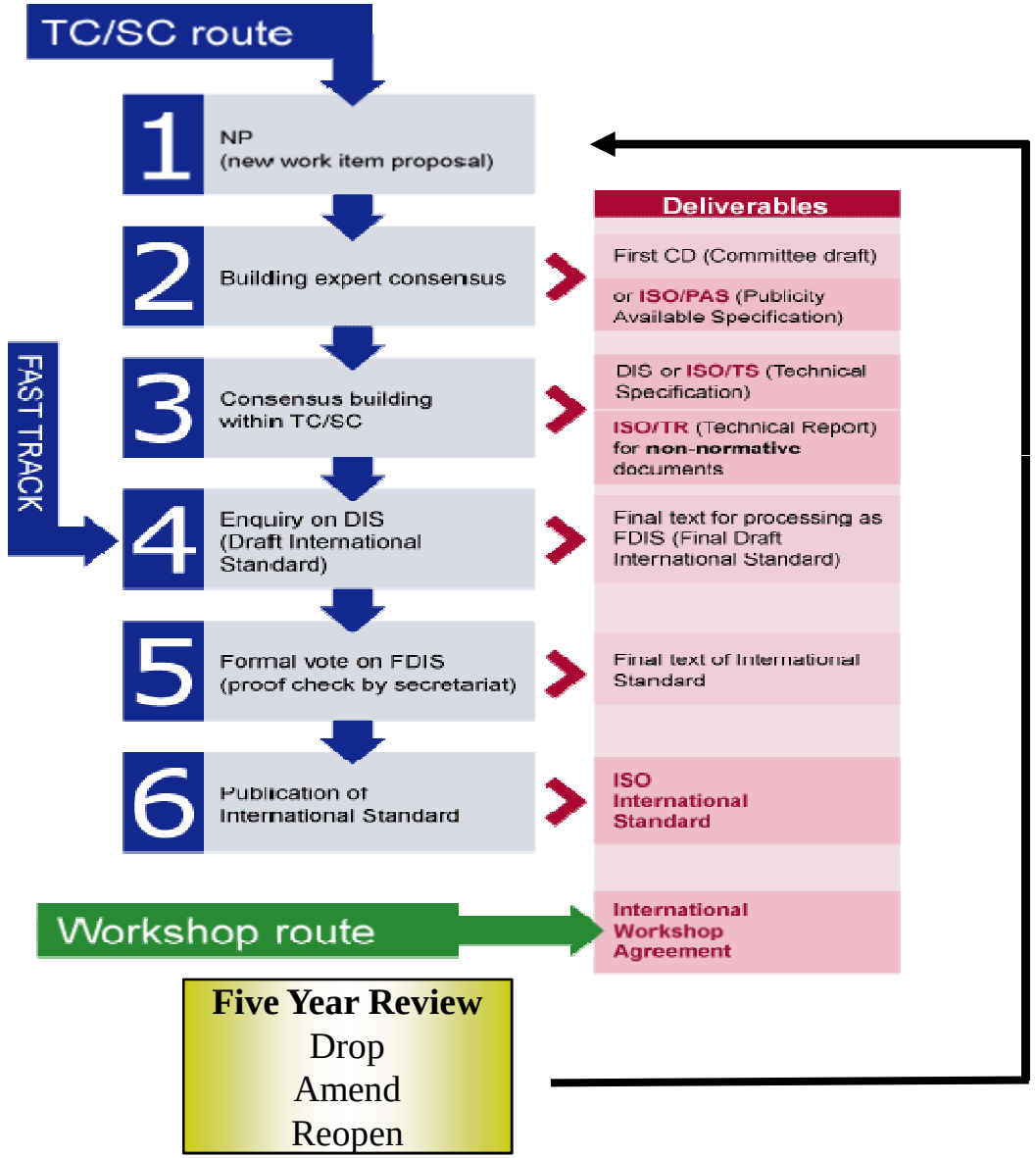
The Alberta Use of ISO Standards

- In 2005 **Alberta system** requires emitters of 100,000 tonnes CO2 must meet an intensity target cut of 12% from 2003/2005 averaged baseline
- **Three options** for companies 1) cuts emissions 2) purchase Albert based offset credits 3) payment of $15.00 per tonne into tech fund.
- In the development of this systems – Alberta adopts **ISO standards and processes** – brought public credibility to a controversial field - protocols built from ISO standards – MRV – Federal offsets rules still under development use ISO Standards except in policy areas like eligibility.
- Initially most companies **sought the risk free** tech fund payments – but significant change starting in 2007 then increasing in 2008 and again in 2009
- More and more **companies buying offsets** (now almost 50%) as they become comfortable with ISO/Alberta systems. The lower costs ($8.00 to $13.00 per tonne) more than cover risks and transactions costs. Future problem of liquidity.

Carbon Capture and Storage

- In June 2010 Can Standards Association and the **International Performance Assessment Centre for Geological Storage of CO_2** (IPAC – CO_2 Research Inc.) announced a joint agreement to develop the first standards for CCS – Joint Canada/US Standard
- When completed these will be **submitted by CSA** to the wider ISO Process for consideration as a international standard.
- These reflect the expertise being developed with 5 large scale commercial CCS projects in **Alberta and Saskatchewan** and their links to projects elsewhere in eight countries on all continents.
- The **new standard when developed** will provide an essential framework for government regulators, inventors, emitters, and the public in assessing the viability of new CCS projects and hopefully contributing to **public credibility**.

Process for Development of ISO Standards



Purpose of Standards

- Create **higher quality** products and services;
- Uniform standards for **consumer** protection;
- Environmental **labeling** for **market** recognition;
- Credible standards help to avoid **trade disputes**;
- Transfer MRV methodology from **developed** to the **developing** world;
- Credible models for **companies**, **associations**, or **nations** to adopt;
- Bottom up process driven by experienced **professionals**;
- Develops the **tools** but leave the programs to the states.

The Challenges

- Building **the International consensus –** time, money, and will – all our people are volunteers.
- We try to avoid outside **political tensions** of participating countries– the US, Israel, Libya, and Iran.
- Meeting the **needs** of **developing countries** with limited or no infrastructure or resources.
- **Differing regulatory culture** (especially US and the EU) – ideology of the environment.
- **Cost effective** standards and process (especially for SME's) economic downturn.

Conclusions

- The **methodology** & **processes** of monitoring, reporting, and verification are critical in building public **credibility** for our work.
- There is little immediate prospect for a Kyoto style global regime but **we must build** the **MRV tools** building **regionally** with compatible tools.
- The **ISO 14000 ser**ies are an important bottom up world wide system contributing and sharing best practices of **professionals** from every continent.
- We brings together the **developed** and **developing** world as well as voluntary and regulated initiatives.
- With our support from **UNEP** we believe we have an important role to play in the **Post Copenhagen** world with its **political and policy uncertainty.**
- One of the basic underlying issues, climate change is **not a problem to be solved** (mitigation) but more a **condition to be managed** (standards and adaptations). MRV has been too focused on just Kyoto style mitigation work. We need to seize new opportunities

Thank you
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