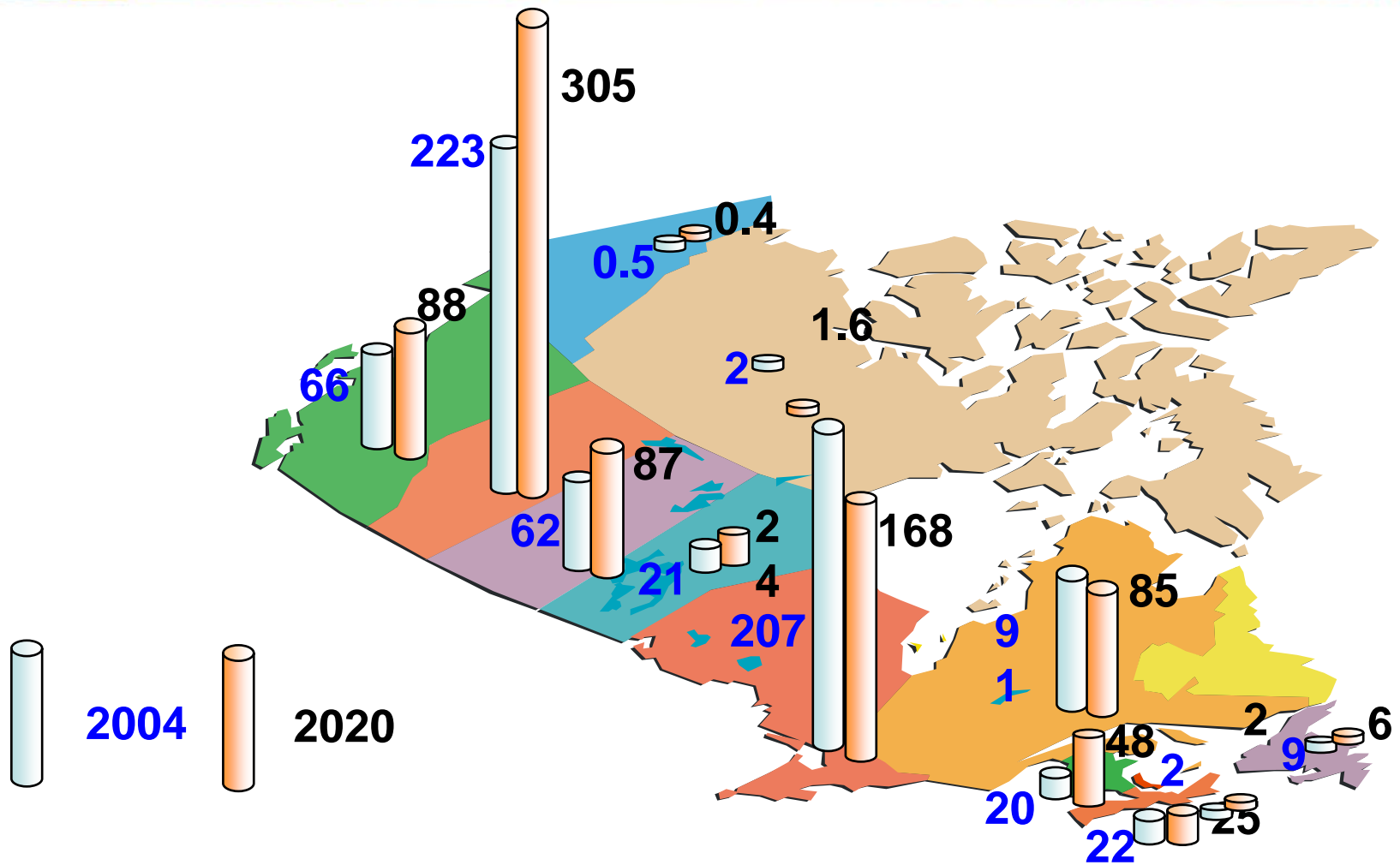




ALBERTA AND THE ENVIRONMENT

Offset Stakeholder Review

October 29 2009





Policy Context for Alberta

- **Economic Context**
 - Strong, growing fossil-fuel focused and export-oriented economy
 - Key product is energy – oil sands growth to meet US energy demand
 - Relatively new manufacturing/industrial base
 - Thermal-based electricity- About 90% of electricity from fossil fuels (coal and natural gas)
- **Social Context**
 - International recognition of the need for action on climate change
 - Wealth as a metric for ability to act
 - General agreement on the need for industry to act
 - Yet limited formal engagement of consumers to date
- **Environmental Context**
 - Provincial emissions growing slightly slower than the economy
 - increased demand is outpacing this intensity improvements
 - 100 large point source facilities = ~50% of total provincial emissions
 - Impacts of a changing climate are being felt today
 - Alberta has ideal geology and potential technology conditions for large scale carbon sequestration



Alberta Approach

- **Long term issue**
 - Need to start with practical, achievable objectives
 - Adjust policies as needed and as we further understand the reduction opportunities
- **Policy certainty for industry**
 - Large investments being made now – expensive to retrofit; investment is often for 40 years+
- **Implementation of new technology will be a big part of the long-term solution.**
- **Market instruments are needed to bridge the gap between current emissions and long-term solutions.**
- **Consumers must be part of the solution**
- **Requires strategic and focused investment in transformational changes (technology, behavioral, etc.)**



Overview of the 07 and 08 Compliance Cycles

- Compliance focus on the Fund
 - \$43 million or 68% for first half year (2007)
 - \$82 million or 63% for full year (2008)
- Growing use of Offsets Trading
 - 1 million tonnes or 25% of compliance true-up (2007)
 - Primarily Tillage and Wind
 - 2.7 million tonnes or 31% of compliance true-up (2008)
- Significant EPCs created
 - 1 million tonnes created – but only 258,000 tonnes or 6.8% used for compliance true-up (2007)
 - 1.8 million tonnes created – but only 568,397 or 6.54% used for true-up (2008)



Growing Offsets Market

- Increasing use of Offsets as compliance option
 - 6 facilities used offsets in 2007
 - 25 facilities used offsets for compliance in 2008
- Increase from 1 to 2.7 million Credits submitted
 - 7 projects using 3 protocol types (2007)
 - 29 projects covering 10 protocol types (2008)
- Additional Credits registered on the Registry



Approved Protocols

- 24 approved protocols
(<http://environment.alberta.ca/1238.html>)
- 4 have been finalized and are being posted:
 - Quantification Protocol for the Substitution of Bitumen Binder in Hot Mix Asphalt
 - Quantification Protocol for Engine Fuel Management and Vent Gas Capture Projects
 - Quantification Protocol for Instrument Gas to Instrument Air Conversion in Process Control Systems
 - Quantification Protocol for Nitrous Oxide Abatement from Nitric Acid Production



Protocols Under Review

- Alberta Environment has identified issues for clarification in several protocols. These issues need to be resolved before the protocols can move forward.
 - **Dairy:** Need to understand industry adoption rates for select activities.
 - **Flyash:** Need to understand industry up-take prior to 2002 and current adoption levels.
 - **Energy Efficiency for Industrial and Commercial Buildings:** GOA review requested expanding the protocol to include changes in management practices. AENV will host a stakeholder session to review revised protocol. Estimate release date early 2010.
 - **Energy Efficiency for Small Residential:** No decision at this time.
 - **Energy Efficiency for Large Residential:** No decisions at this time.
 - **Biofuel Expansion:** Will be reviewed in conjunction with AENV's expansion treatment for regulated facilities.
 - **Afforestation:** being revised to correct errors that were identified in the protocol.

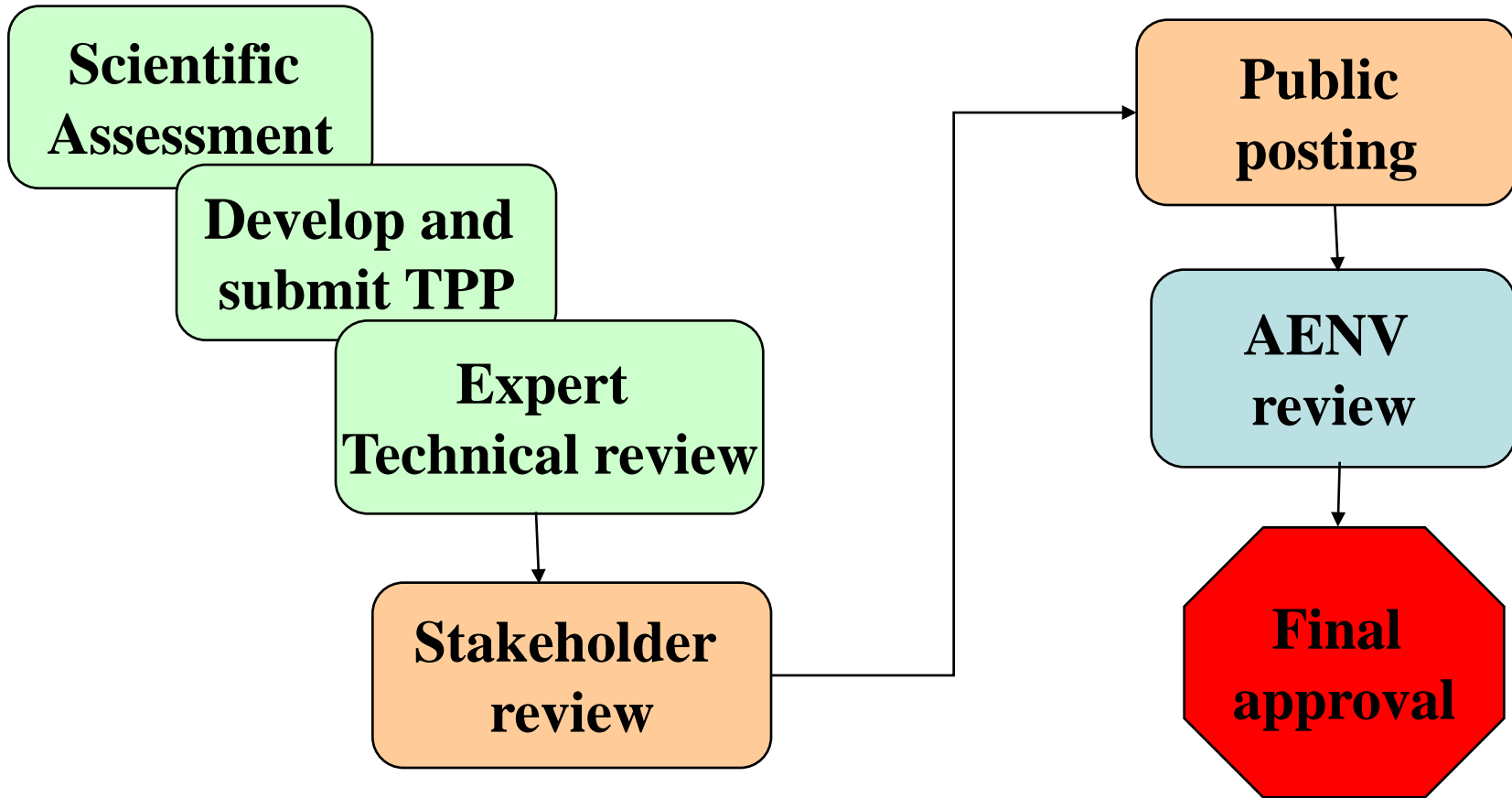


Learnings to Date

- Substantial interest in the Offset market including market participants and other jurisdictions.
- Credibility of Offset System was a major issue flagged by the Auditor General
 - Protocols need to speak to expanded assurance to verify that emissions reductions have occurred
- System needs to hold up to scrutiny from other jurisdictions
 - Need for high quality, scientifically based protocols
 - Getting inundated with protocol ideas that do not meet minimum system requirements identified in SGER
 - Review process needs to ensure a balanced perspective



Protocol Development Process





AENV Role

- Early protocols were based on work done by the national working group
 - Alberta was a participant.
 - Had understanding and comfort around science and quantification methodology
- Recent protocol review open to interested parties to bring forward ideas
 - Allowed market ingenuity
 - AENV not directly involved
 - Lead to confusion and lack of understanding when protocols were presented for final approval



AENV Role con't

- Current protocol development process
 - Open to market proponents to bring forward ideas
 - AENV participating in expert/stakeholder review
 - Due diligence to ensure all appropriate stakeholders
 - Ensure a balanced perspective
 - (However, protocol Developers also need to consider these points during the protocol development process)
 - GOA engagement and acceptance of protocols
 - Offset Projects cannot be contracted, initiated, or Credits generated and sold until protocols have been approved by Alberta Environment
- More work up front but less delay on backend



AENV Review Criteria

- Eligibility against SGER requirements
- Additionality of activity
- Suitability and defensibility of baseline
- Balanced review process
- Ability to support higher level assurance



Timing

- Moving to annual protocol intake in fall
 - Allows sufficient time to review proposed protocols
 - Staggers protocol development compared to compliance review
 - Provides a fixed time period for planning purposes
- Barring unforeseen issues, protocols going through stakeholder review in fall should be approved for the following compliance cycle
 - Issues identified at any time in the protocol development process will be addressed and may delay the approval process
 - Project developers should not sign contracts for projects that do not have an approved protocol
- **NOTE protocols approved after November 30 will be eligible for the following compliance cycle.**



Thank You

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