



Montana Climate Change Advisory Committee Meeting #5

May 11, 2007

Today's Agenda

- Welcome and Call to Order
- Review and Approval of the Summary of the 4th Montana Climate Change Action Committee (CCAC) Meeting
- Update on Montana Climate Change Activity
- Review and Approval of Draft Policy Options
- Review of Updates to the Montana Greenhouse Gas Emissions Inventory and Forecast
- Public Input
- Agenda, Time, and Date for Next CCAC Meeting

Ten Step Work Plan

- Get organized
- Develop initial GHG inventories and forecasts
- Identify possible GHG mitigation options
- Identify initial priorities for first round evaluation
- Draft straw design proposals for draft mitigation options
- Evaluate GHG reduction potential, cost/cost savings
- Identify potential barriers to consensus, alternatives
- Modify, add or subtract mitigation options as needed
- Evaluate cumulative results of mitigation options
- Finalize emissions projections, recommendations and report language

CCAC Review and Approval of Pending Mitigation Options

- TWG leader presents proposed options
- Clarifying questions and comments
- Identification of objections, alternatives
 - If no objections, draft option is approved as final
 - If objections, CCAC discusses proposed alternatives and votes again if/as needed
 - Options not agreed to in full at this meeting will be referred back to TWGs and presented at the next CCAC meeting

Residential, Commercial, Institutional and Industrial

- RCII-1: Demand Side Management Programs, Efficiency Funds and Requirements
- RCII-2: Market Transformation and Technology Development Programs
- RCII-3: State Level Appliance Efficiency Standards and State Support for Improved Federal Standards
- RCII-4: Building Energy Codes
- RCII-5: “Beyond Code” Building Design Incentives and Mandatory Programs
- RCII-6: Consumer Education Programs

Residential, Commercial, Institutional and Industrial

- RCII-7: Support for Implementation of Clean Combined Heat and Power
- RCII-8: Support for Renewable Energy Applications
- RCII-9: Carbon Tax
- RCII-10: Industrial Energy Audits and Recommended Measure Implementation
- RCII-11: Low income energy efficiency programs
- RCII-12: State Lead by Example
- RCII-13: Metering technologies with opportunity for load management and choice

Break



Energy Supply

- ES-1: Environmental Portfolio Standard (Renewables and Energy Efficiency)
- ES-2: Renewable Energy Incentives
- ES-3: Research and Development (R&D), Including R&D for Energy Storage and Advanced Fossil Fuel Technologies
- ES-4: Incentives and Barrier Removal for Combined Heat and Power (CHP) and Clean Distributed Generation (DG)
- ES-5: Incentives for Advanced Fossil Fuel Generation and Carbon Capture and Storage (CCS)

Energy Supply

- ES-6: Efficiency Improvements and Repowering of Existing Plants
- ES-7: Demand-Side Management
- ES-8: CO₂ Tax
- ES-9: GHG Cap-and-Trade
- ES-10: Generation Performance Standards or GHG Mitigation Requirements for New (and/or Existing) Generation Facilities, with/without GHG Offsets

Energy Supply

- ES-11: Methane and CO₂ Reduction in Oil and Gas Operations, Including Fuel Use and Emissions Reduction in Venting and Flaring
- ES-12: GHG Reduction in Refinery Operations, Including in Future Coal-to-Liquids Refineries
- ES-13: CO₂ Capture and Storage or Reuse (CCSR) in O&G Operations, Including Refineries and Coal-to-Liquids Operations

Break



Transportation

- TLU-1: Light Duty Vehicle Clean Car Program
- TLU-2: Fuel Efficient Replacement Tires
- TLU-3: Vehicle MPG Consumer Information
- TLU-4: Financial and Market Incentives for Low GHG Vehicle Ownership and Use
- TLU-5: Growth and Development Bundle
- TLU-6: Transition into Low-Carbon Fuels
- TLU-7: Heavy Duty Vehicle Emissions Standards and Incentives

Transportation

- TLU-8: Heavy-Duty Vehicle and Locomotive Idle Reduction
- TLU-9: Procurement of Efficient Fleet Vehicles
- TLU-10: Transportation System Management
- TLU-11: Intermodal Freight Transportation
- TLU-12: GHG Emissions Reductions from Off-Road Engines and Vehicles
- TLU-13: Reduced GHG Emissions from Aviation

Break



Agriculture, Forestry & Waste Management

- AFW-1: Agricultural Soil Carbon Management Programs
- AFW-2: Biodiesel Production (incentives for feedstocks and production plants)
- AFW-3: Ethanol Production
- AFW-4: Incentives for Enhancing GHG Benefits of Conservation Provisions of Farm Bill Programs
- AFW-5: Preserve Open Space & Working Lands
- AFW-6: Forest Health Programs for Carbon Management – *Dropped by TWG; Elements folded into Options 7-9.*
- AFW-7: Expanded Use of Forest Biomass Feedstocks for Energy Use
- AFW-8: Afforestation and Reforestation Programs
- AFW-9: Improved Management and Restoration of Existing Stands
- AFW-10: Expanded Use of Wood Products for Building Materials
- AFW-11: Programs to Promote Local Food and Fiber
- AFW-12: Enhanced Solid Waste Recovery and Recycling

Cross Cutting Issues

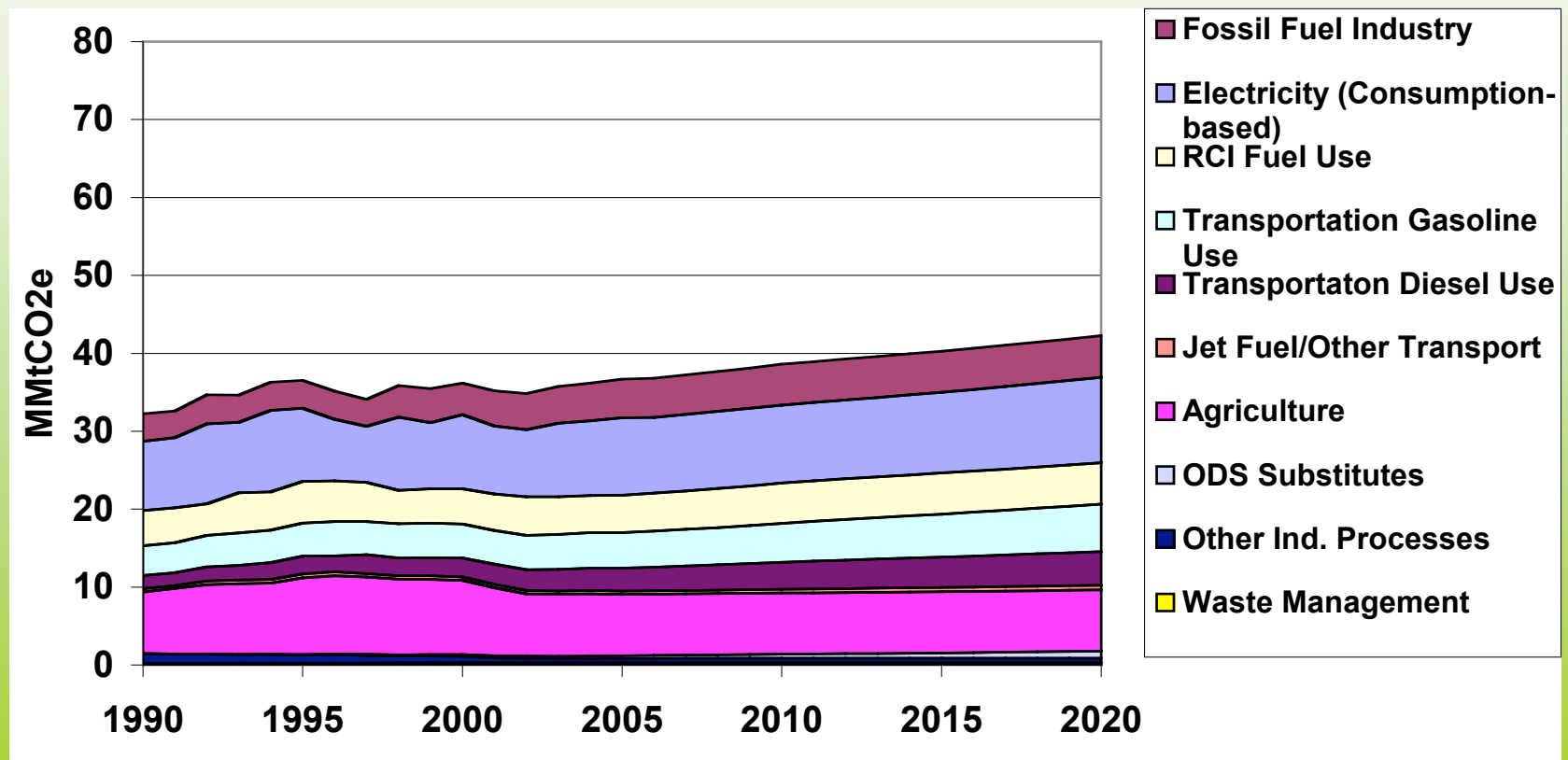
- CC-1: GHG Inventories and Forecasts
- CC-2: GHG Reporting
- CC-3: GHG Registry
- CC-4: State Climate Public Education and Outreach
- CC-6: Options for Goals or Targets
- CC-7: State's Own GHG Emission

Inventory & Forecast Updates

- Energy Supply
 - Two future projections – reference case and high fossil fuel scenario
 - Production and consumption-based reporting for electric sector

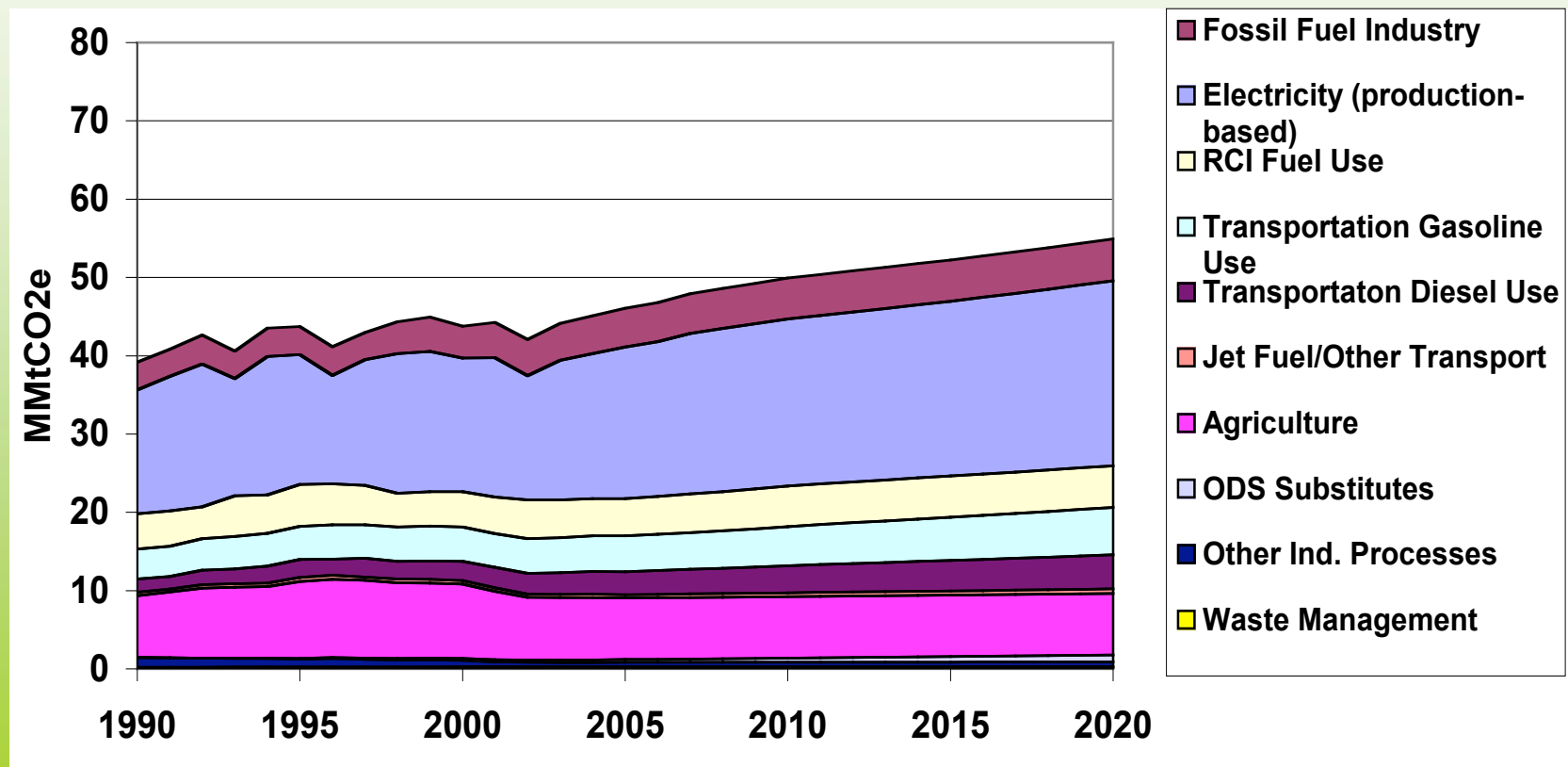
Inventory & Forecast Updates

Reference case, consumption-based



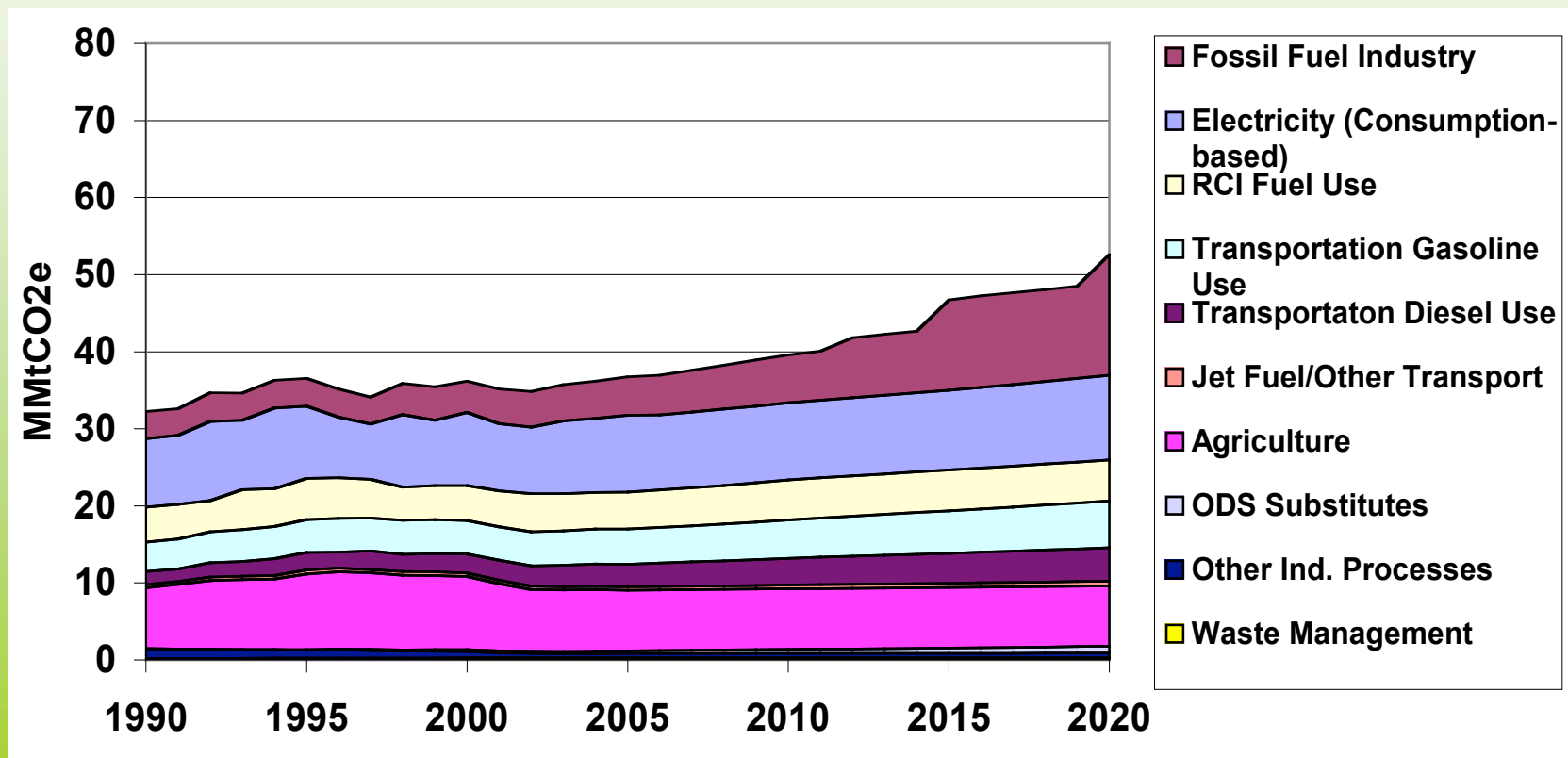
Inventory & Forecast Updates

Reference case, production-based



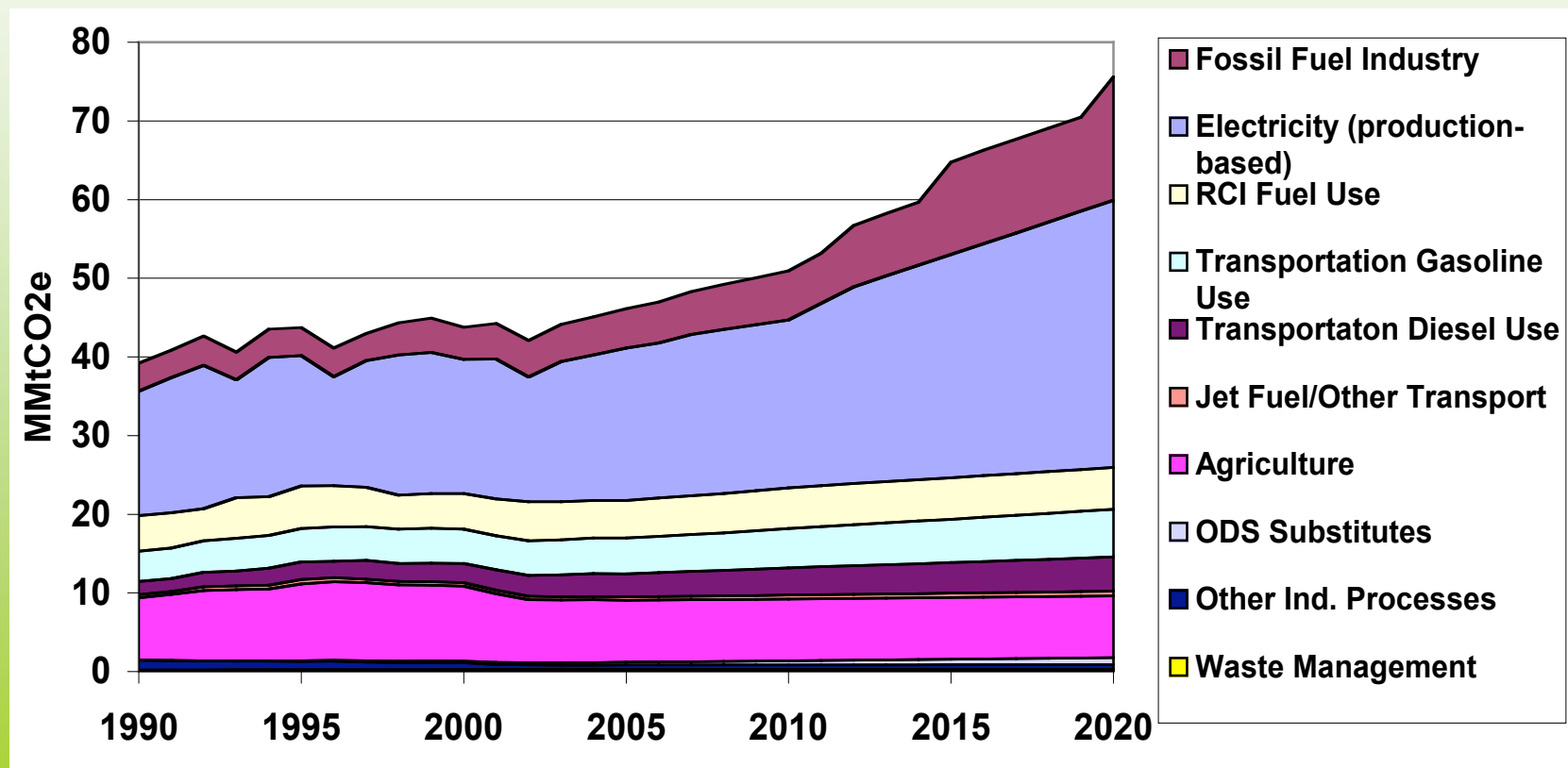
Inventory & Forecast Updates

High Fossil Fuel case, consumption-based



Inventory & Forecast Updates

High Fossil Fuel case, production-based



Inventory & Forecast Updates

- Transportation and Land Use
 - TWG has recommended that VMT forecast use 1.92% annual increases through 2020
- Forestry:
 - Revised appendix and final report text reviewed by TWG
 - Forest carbon sink revised downward from -49.7 MMt to -36.3 MMt

Public Input, Announcements

Next CCAC Meeting

- Agenda:
 - Review and approval of remaining draft mitigation policy options
- July 2007

