

Maryland Climate Change Commission Technical Working Group

Transportation and Land Use
Meeting #13 – May 1, 2008, 2:00pm

Maryland Department of the Environment
Maryland Energy Administration
Center for Climate Strategies

Today's Agenda

- Call to order and roll call
- Review and approve prior meeting summary
- Review recommendations from April 22 MWG meeting
- Finalize and approve straw proposal quantification
- Public input and announcements

Stepwise Planning Process

1. Develop inventory and forecast of emissions
2. Identify a full range of possible actions
3. Identify initial priorities for analysis
4. Develop straw proposals
5. Quantify GHG reductions and costs/savings
6. Evaluate externalities, feasibility issues
7. Develop alternatives to address barriers
8. Aggregate results
9. Iterate to final agreements
10. Finalize and report recommendations

Option No.	Policy Option	GHG Reductions (MMtCO ₂ e)			Net Present Value 2008-2020 (Million \$)	Cost-Effectiveness (\$/tCO ₂ e)		Level of Support
		2012	2020	Total 2008-2020				
		<i>TLU Area 1: Reduce emissions 20% from 2020 baseline</i>						
TLU-1	Carbon Fuel Tax Fund (\$0.15 > \$2.00/gal)	2.9	7.6	53.1				
TLU-2	Land Use and Location Efficiency	0.8	2.5	16.4	NA		Pending	
TLU-3	Transit	1.7	4.6	27.6	Large net savings		Pending	
TLU-5	Intercity Travel: Aviation, High Speed Train, Bus	1.7	2.8	20.3	TBD	TBD	Pending	
TLU-6	Pay-as-you-Drive Insurance	TBD	TBD	TBD	TBD	TBD	Pending	
TLU-7	VMT Budgets	1	4.3	27.2	Net savings		Approved	
TLU-8	Bike and Pedestrian Infrastructure	NA (implemented via TLU-2, et al.)					Pending	
TLU-9	Commuter Choice and other Pricing Measures	Included in TLU-3					Pending	
TLU-11	Evaluate the GHG Emissions Impacts of Major Projects	1.9	2.2	21	TBD	-\$1 to -\$643	Pending	
<i>TLU Area 2: Reduce carbon per unit of fuel</i>								
TLU-4	Low Greenhouse Gas Fuel Standard	0.7	1.9	12.8	501.7	30-90	Approved	
<i>TLU Area 3: Reduce carbon per mile and/or per hour</i>								
TLU-10	Transportation Technologies	1.21	3.2	22.4	4,091	(200)-1500	Pending	
	Sector Total [before] Adjusting for Overlaps [with lower TLU-4]	4.81	12.7	88.3				
	Reductions From Recent Actions	.07	.09	0.99				
	Sector Total Plus Recent Actions	4.9	12.79	89.29				

Business-As-Usual Emissions

<i>Source</i>	<i>1990</i>	<i>2005</i>	<i>2020 (BAU)</i>
<i>On-road gasoline</i>	<i>17.91</i>	<i>23.94</i>	<i>28.78</i>
<i>On-road diesel</i>	<i>2.91</i>	<i>5.89</i>	<i>9.18</i>
<i>Jet fuel/aviation</i>	<i>1.49</i>	<i>1.31</i>	<i>1.42</i>
<i>Boats and ships-- ports/inshore</i>	<i>1.16</i>	<i>0.87</i>	<i>0.93</i>
<i>Boats and ships-- offshore</i>	<i>0.21</i>	<i>0.31</i>	<i>0.37</i>
<i>Rail</i>	<i>0.39</i>	<i>0.06</i>	<i>0.06</i>
<i>Other</i>	<i>0.14</i>	<i>0.14</i>	<i>0.19</i>
<i>Total</i>	<i>24.21</i>	<i>32.52</i>	<i>40.93</i>
<i>GHGs to reach target 25% reduction from 2006</i>			<i>24.39</i>
<i>Reduction needed from 2020 estimate</i>			<i>16.54</i>

Business-As-Usual VMT

	1990	2005	2020 (BAU)
Heavy Duty Diesel Vehicle	2,257	3,795	5,694
Heavy Duty Gas Vehicle	554	560	744
Light Duty Diesel Truck	303	574	1,489
Light Duty Diesel Vehicle	259	172	447
Light Duty Gas Truck	10,536	19,079	23,836
Light Duty Gas Vehicle	26,464	32,351	40,418
Motorcycle	164	194	242
Total	40,536	56,725	72,870

Maryland Transportation Sector Emissions and MD Goals

Emission Totals (MMtCO₂e)

	2006	2020
Onroad Gasoline	23.94	28.78
Onroad Diesel	5.89	9.18
Total	32.52	40.91

Maryland Goals

2015

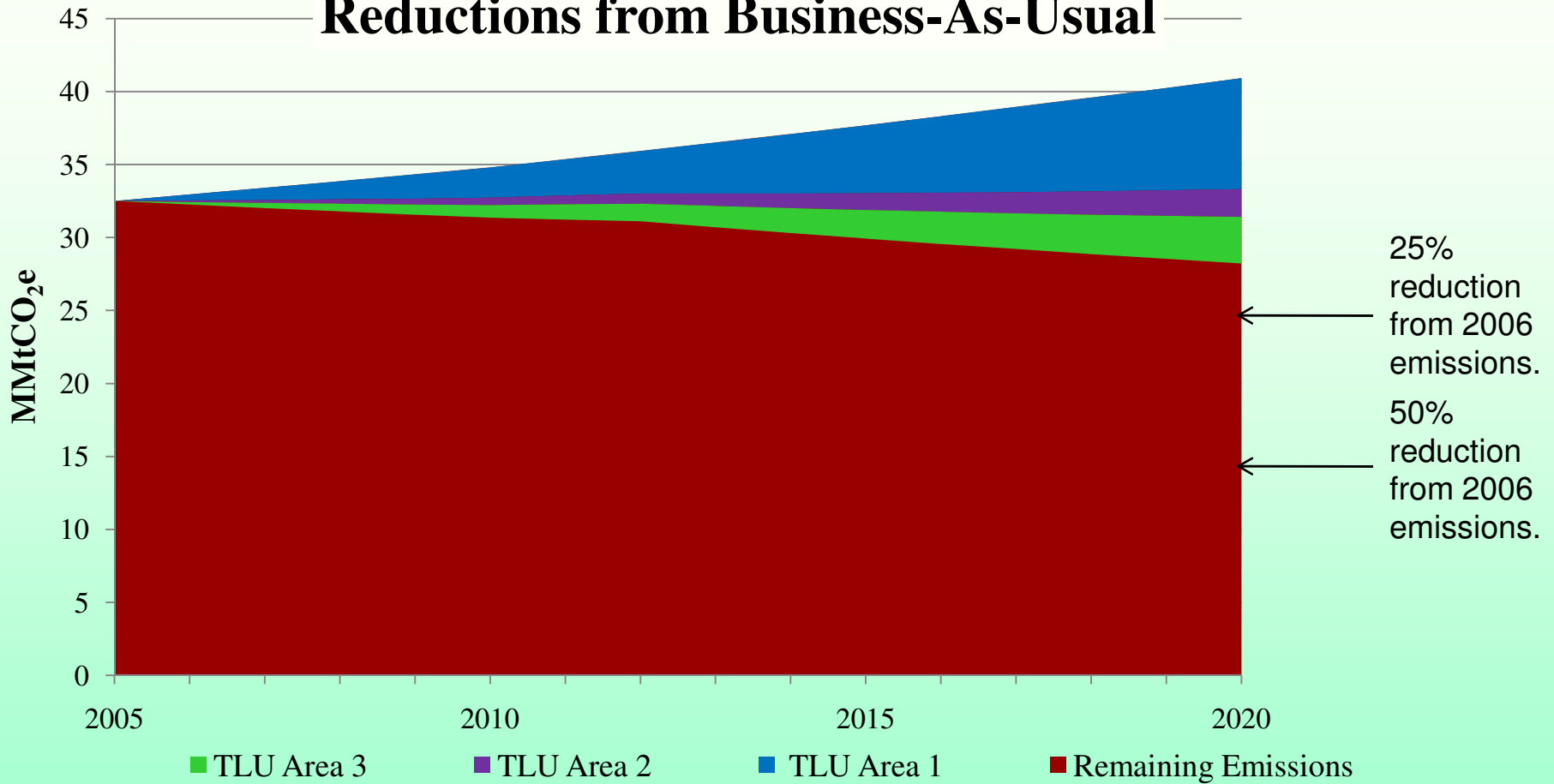
- 10% below 2006 levels by 2012
- 15% below 2006 levels by 2015

2020

- 25-50% below 2006

Reductions of 25-50% from 2006 estimates = 16.52 to 24.65 MMtCO₂e
reduction from BAU in 2020.

Reductions from Business-As-Usual



Approved Policy Options

- TLU 4 – Low GHG Fuel Standard
- TLU 6 – PAYD insurance
- TLU 11 – Evaluate GHG impacts of major projects.

TLU-1 Carbon Fuel Tax Fund

- Review revised text in the POD.
- MWG supports carbon tax for revenue generation.
- Questions to the TWG:
 - Justify \$2 per gallon amount, if possible.
 - Does it make sense to front load the tax to the early years? (As opposed to a slow ramp-up)
 - Consider 50 cent per gallon in years 1 and 2, 1\$ in years 3 and 4...2\$ in years 7 and 8.
 - CCS add if, then clause from South Carolina example

TLU-2 Land Use and Location Efficiency

- TLU-7 has been folded into TLU-2. (The MWG approved this)
- Review combined version and suggest edits.

TLU-3 Transit

- Review text changes (no major edits here).

TLU-5 Intercity Travel

- The MWG indicated that quantification is needed.
- Use the AASHTO Rail Freight Needs Study as a straw proposal/indicator for quantification.
- Revise high speed rail terminology.

TLU-8 Bike and Pedestrian Infrastructure

- The MWG wants this item to be quantified separately from TLU-3.
- Make reasonable assumptions for quantification.
- MDOT will comment at TWG meeting

TLU-9 Transportation Incentives and Pricing Measures

- TWG needs to review the revisions (there have been major changes)
 - See title change
 - Focus on tolling issues
 - Need clear goals

TLU-10 Transportation Technologies

- Final Review Needed.

May 6/7 Conference Call with ES

- There will be a teleconference between representatives of the TLU and ES groups on May 6th or 7th.
- This will be to finish up the math before May 9th.

TWG/MWG Next Steps

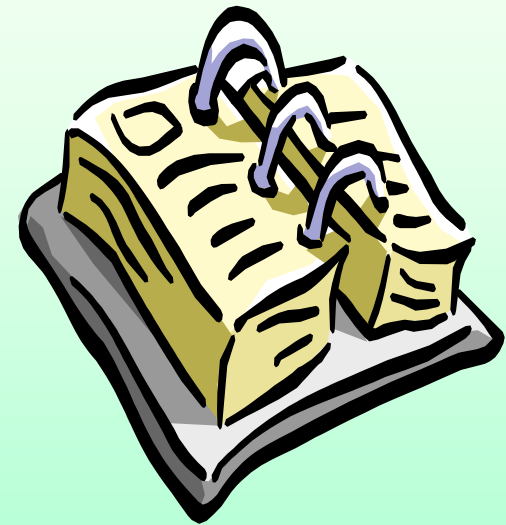
- CCS will make final revisions of the straw proposals as necessary.
- Present final quantifications at May 9th MWG meeting.

Key Dates

<u>Date</u>	<u>Meeting</u>
May 6/7	TLU/ES Conference Call
May 9, 2008	Final MD MWG Meeting

Next MWG Meeting

- Date and Time
 - May 9, 2008
- Agenda
 - Finalize and Approve Policy Option Descriptions



Public Input, Announcements