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Forestry, Agriculture, and Waste Management Technical Work Group
Summary List of Draft Priority Policy Options for Analysis

Revised Option #	Draft Policy Option Name	Straw Proposal Volunteers
FAW-1	Forest Management Strategies for Carbon Sequestration	Ron Wolfe, Rick Rogers, Chris Maisch
FAW-2	Expanded Use of Biomass Feedstocks for Energy Production	Charles Knight, Ron Wolfe , Rick Rogers
FAW-3	Advanced Waste Reduction and Recycling	Donna Mears, Kathie Wasserman, Doug Buteyn , Charles Knight
	Expanded Use of New, Used, & Recycled Wood Products for Building Materials	<i>Designated a medium priority option by unanimous TWG consent on 10/01/2008</i>
	In-State Liquid Biofuels Production	<i>Consolidated with FAW-2 by unanimous TWG consent on 10/01/2008</i>

Sample Draft Policy Option Template

FAW-1 Forest Management for Carbon Sequestration

Policy Description

The “Policy Description” is a part of the Straw Proposal. CCS will provide sample text for volunteer sub-groups to work from. This section should provide a **brief** summary of the proposed policy option.

CCS default text:

Forest management activities that promote forest productivity and increase the rate of carbon dioxide sequestration in forest biomass and soils and in harvested wood products. Practices may include clearing and conversion of forest cover type to achieve higher sequestration levels, increased stocking of poorly stocked lands, age extension of managed stands, thinning and density management, fertilization and waste recycling, expansion of short-rotation woody crops (for fiber and energy), expanded use of genetically preferred species, modified biomass removal practices, fire management and risk reduction, and pest and disease management. Programs that reduce the potential for and severity of wildfires also reduce GHG emissions by lowering the forest carbon lost during the fire in addition to the subsequent losses of carbon sequestration potential in the area impacted by wildfire. Prescribed fires may increase carbon in soil. Mechanical removal of biomass may provide sources of biomass that can be used for conversion to energy. Adoption of water conservation, improved harvesting technology such as improved equipment, and other GHG-reducing agricultural practices that can be applied to silviculture.

Establish forests on land that has not historically been forested (e.g., agricultural land; “afforestation”). Promote forest cover and associated carbon stocks by regenerating or establishing forests in areas with little or no present forest cover (“reforestation”). In addition, implement practices such as soil preparation, erosion control, and stand stocking to ensure conditions that support forest growth.

Policy Design

The “Policy Design” is the other part of the Straw Proposal. The “Goals” represent the **numerical** targets that the TWG feels are attainable by the end of the policy period (2020), and will provide sufficient carbon benefits. The “Timing” bullet is a place for the TWG sub-group to insert an incremental target (2012), or multiple incremental targets. The “Parties Involved” bullet includes a list of organizations (specific or otherwise) that could be affected by this proposed option, or are parties to the implementation of the option. *Please see example below a Policy Design from the Michigan Process:*

Goals:

- Increase permanent forestland cover (including improved stocking of under-stocked stands) across the state on 1 million acres through afforestation and reforestation by 2025.

- Implement wildfire reduction Community Wide Protection Plans for 10-12 identified communities at risk by 2025.

Timing: See above

Parties Involved: Private landowners; Michigan Forestry Association; Michigan Departments of Agriculture, Conservation Districts; environmental/sustainability interests; Forest Industries; People and Land (a Kellogg Foundation funded organization which tracks progress on the 2003 Michigan Land Use Leadership Conference Report recommendations); The Global Observatory for Ecosystem Services; Michigan United Conservation Club; The Nature Conservancy, USFS State and Private Forests; Michigan State University Extension; Farm Bureau; Forest Industry; Carbon Traders.

Other: Note that plantations of native trees should be encouraged – not fast-growing trees from Southeast Asia.

Sample Draft Policy Option Template

FAW-2 Expanded Use of Biomass Feedstocks for Energy Production

Policy Description

Increase the amount of biomass available from forestry, waste, and agriculture for generating heat and electricity and displacing the use of fossil energy sources. Foster the development of:

- wood biomass alternate fuel products or heat and electric generation from sawmill by-products;
- methods to economically utilize that portion of harvested trees not being used to make conventional forest products, waste reclamation or agriculture to make wood biomass alternate fuel products or heat and electric generation;
- methods to economically utilize biomass generated from silviculture treatments, wildland fuel treatments, waste reclamation or agriculture in the production of biomass alternate fuel products or heat and electric generation;
- large and small scale technologies that generate heat and electricity in the production of biomass synthetic fuels from biomass; and
- opportunities for industry, communities and individuals to use biomass alternate fuel products to substitute for diesel for heat or transportation.

Policy Design

Goals:

(General comment from TWG member: I think it is difficult to make an informed goal estimates based on % of available resources. Maybe we should consider a different type of metric such as xx number of communities completing public or commercial facility biomass heating projects, xx demonstration projects, xx commercial applications.)

Should a goal also address avoiding increase in PM-10 and CO? Like the MTBE fiasco which reduced CO and exacerbated groundwater pollution, I would hate to see CO2 reductions result in other air quality problems.

- By 2020, increase production of electricity, heat generation, synthetic fuels and biomass alternate fuel products to utilize XX% of the available wood, waste reclamation and

agriculture residue biomass.

- By 2020 offset xx% of existing coal combustion through cofiring technologies (should consult with Fairbanks utility, Steve Denton at Usabeli)

Timing:

- By 2010, establish a demonstration pilot facility to produce biomass electricity, heat generation, synthetic fuels or biomass alternate fuel products. (this type of goal makes more sense that trying to quantify % of available resource)
- By 2012, increase biomass electricity, heat generation, synthetic fuels and biomass alternate fuel products to utilize an additional XX% of available resource.
- By 2014, utilize XX% of practical and available resource.
- By 2016, utilize XX% of practical and available resource.
- By 2018, utilize XX% of practical and available resource.
- By 2020, utilize XX% of practical and available resource.

Coverage of Parties:

Governor of Alaska

Alaska Department of Natural Resources

Alaska Department of Environmental Conservation

Alaska Energy Authority

Alaska Native Corporations

University of Alaska

Southeast Conference

Alaska Industrial Development Authority

Cooperative Extension Service and Agencies

Natural Resource Conservation Service

Alaska State Chamber of Commerce

Resource Development Council

Alaska Forest Association

Alaska Public Service Commission

Alaska Department of Revenue

Alaska electric utilities and electric cooperatives

crop producers, and

timberland owners.

Other: Explore biomass production for utilization in electricity, heat generation, synthetic fuels and biomass alternate fuel products using 100% biomass and/or co-firing with other feedstock.

Sample Draft Policy Option Template

FAW-3 Advanced Waste Reduction and Recycling

Policy Description

Increase recycling and reduce waste generation in order to limit GHG emissions upstream from material production, through transportation and on the downstream end associated with landfill methane generation. Reduction of generation at the source reduces both landfill emissions and upstream production and transportation emissions. Increase recycling programs, create new recycling programs, provide incentives for the recycling of construction materials, develop markets for recycled materials, and increase average participation and recovery rates for all existing recycling programs.

Policy Design

Goals: Quantify current waste generation rates (pounds per capita per day) for rural and urban areas. Reduce waste stream, including diverted waste, 10% in 2012, 15% by 2015, and 25% by 2020.

Timing: Startup in 2010 and ramp up to higher levels in 2012 and 2015, consistent with goals

Parties Involved: Consumers, Manufacturers, relevant trade associations, consumer's associations, all state and local agencies, consumers, retail outlets

Other: