

Biomass Research and Development Technical Advisory Committee

**DoubleTree by Hilton Washington DC-Crystal City
300 Army Navy Drive, Arlington, VA 22202
March 27-28, 2019**

Quarter 1 Meeting Summary

I. Purpose

On March 27 – 28, 2019, the Biomass Research and Development (R&D) Technical Advisory Committee (“Committee”) held its first meeting of 2019. The meeting focused on setting the stage for the Committee’s 2019 theme “Year of the Tree.” Presentations were heard from individuals of the U.S. Forest Service, The Nature Conservancy, U.S. Endowment for Forestry & Communities, and North Carolina State University. The Committee also received updates from both the U.S. Department of Energy’s Bioenergy Technologies Office (BETO) and from the U.S. Department of Agriculture (USDA). See Appendix A for a list of meeting attendees and Appendix B for the meeting agenda. Meeting presentations can be viewed on the Biomass R&D Board website.

II. Welcome

Doug Faulkner & Kelly Tiller, Committee Co-Chairs

- Provided an overview and background of the Committee, including its purpose, and the goal of the meeting, which was to determining the direction for “The Year of the Tree”
- There was an update on the delayed appointment of new members and notification that former TAC Co-chair, Don Stevens, had passed away in February 2019.

III. USDA Update

Bill Hohenstein, Director, Climate Change Program Office, Acting Director, Office of Environmental Markets, and Acting Director, Office of Energy Policy and New Uses

- Mr. Hohenstein provided updates on the [2018 Farm Bill](#).
- A new member specializing in carbon sequestration will need to be appointed to the TAC.
- The [Bioeconomy Initiative Implementation Framework](#) was launched in March 2018.

IV. DOE Updates and Biomass R&D Activities (Presentation)

Jonathan Male, Director, Bioenergy Technologies Office, DOE

- Dr. Male provided updates on behalf of DOE’s Bioenergy Technologies Office (BETO) including the 2019 DOE Peer Review. All presentations from the Peer Review are available [online](#).
- Notified the Committee of the next Biomass R&D Board Meeting, scheduled for April 11th at DOE Headquarters in Washington, DC.
- Informed the Committee of the current Office of Energy Efficiency and Renewable Energy Funding Opportunity Announcement on Waste-to-Energy fuels for the Heavy Duty Transportation Sector.

V. Q1 Quarterly Focus Topic: “Opportunities for coordinating woody bioenergy with healthier and safer forest management”

Doug Faulkner & Kelly Tiller, Committee Co-Chairs

- Reviewed State of California Proclamation of a [State of Emergency](#) due to an increase in wildfire risk (dated 3/22/2019).
- Discussed [Executive Order](#) on *Promoting Active Management of America’s Forests, Rangelands, and other Federal Lands to Improve Conditions and Reduce Wildfire Risk*
- Tasked TAC Subcommittees to determine what “forest health” means and what subjects the Committee should discuss throughout the year.
- Revisited the [Q4 Meeting Recommendations](#) on regulatory barriers and how it will influence the Committee’s 2019 activities.

VI. Renewable Wood Energy Updates from USFS (Presentation)

Julie Tucker, National Lead for Renewable Wood Energy, U.S. Forest Service

- Presented on uses and availability for woody biomass across America, specifically woody biomass that has died and presents fire risk.
- Stressed a need to find markets and deploy technologies for woody biomass and residuals.
- Described the challenges associated with utilizing standing dead trees, such as transportation costs, fuel prices and the lack of advantageous policy.

VII. Current US Public Forest Conservation Priorities in The Nature Conservancy (Presentation)

Chris Topik, Director, Forest Conservation Program and Policy, North America for The Nature Conservancy

- Discussed the threats to forest land and private property due to fire and the management steps that can reduce that impact.
- Described existing efforts in restoring America’s forests and possible solutions
- Recommended reading [USDA Report Toward Shared Stewardship Across Landscapes: An Outcome-Based Investment Strategy](#)

VIII. Monetizing Woody Biomass (Presentation)

Carlton Owen, President & CEO, U.S. Endowment for Forestry & Communities

- Focused on the US Endowment’s market-based approach as a public trust to help rural communities by providing green power and healthier forests.
- Described the possibility for woody biomass to provide options in dispatchable power.
- Discussed how incentives and more flexibility for utility companies could make woody biomass economically feasible.

IX. Southern Forest Markets (Presentation)

Bob Abt, Professor of Natural Resource Economics and Management at North Carolina State University, Co-Director, Southern forest Resource Assessment Consortium

- Provided an analysis of trends in forest inventory over the past decades
- Discussed the economic and supply trends in sawtimber, pulp wood and pellets.
- Described how total forest carbon could be effected by pellet demand.

X. Subcommittee Breakouts

- Conversion Subcommittee
- Sustainable Feedstocks Production and Logistics
- Products, Markets, and Systems Group

XI. Closing comments

- Quarter 1 TAC Recommendations were discussed and agreed upon.
- Plans for future 2019 Quarterly Meetings were discussed, specifically around possible site visits

Appendix A: Committee Member Attendance—March 27-28, 2019

Co-Chairs		Affiliation	Attended?
Doug	Faulkner	Leatherstocking, LLC	Y
Kelly	Tiller	Genera Energy	Y
Members			
Charles	Abbas	iBiocat	Y
Brent	Bean	United Sorghum Checkoff Program	Y
Michael	Beardsley	Liberty University	N
Jacques	Beaudry-Losique	Algenol Biotech LLC	Y
Esteban	Cornet	Enerkem	Y
Katrina	Cornish	Ohio State University	Y
William	Frey	Georgia-Pacific	Y
Manuel	Garcia-Perez	Washington State University	Y
Aviva	Glaser	National Wildlife Federation	Y
Elizabeth	Hood	Arkansas State University	N
Ray	Huhnke	Oklahoma State University	Y
Randy	Jennings	Tennessee Department of Agriculture	N
Alan	Keller	POET, LLC	Y
Pete	Madden	Drax Biomass	Y
Michael	McAdams	Advanced Biofuels Association	Y
Shelie	Miller	University of Michigan	N
Tim	Rials	University of Tennessee	Y
Matthew	Rudolf	Forest Trends	N
Susan	Rupp	Enviroscapes Ecological Consulting	Y
Basu	Saha	University of Delaware	Y
Patricia	Scanlan	Scanlan Environmental	Y
Lawrence	Sullivan	The Citadel and Trident Technical College	Y
Valerie	Thomas	Georgia Institute of Technology	Y
Michael	Wolcott	Washington State University	Y

Total: 21 of 26 Members Attended

Appendix B: Agenda—March 27-28, 2019

Agenda
Public Meeting of the Biomass Research and Development
Technical Advisory Committee
March 27-28, 2019

DAY 1	Technical Advisory Committee Meeting	March 27, 2019
8:00 – 8:30 am	Continental Breakfast	
8:30 – 9:00	Welcome & Introductions	<i>Co-Chairs</i> <i>Designated Federal Officer</i>
9:00 – 9:30	DOE & USDA Updates: Farm Bill, Implementation Framework, Recent funding announcements, Recent forest management Executive Order, etc.	<i>DOE – Jonathan Male</i> <i>USDA – Bill Hohenstein</i>
9:30 – 9:45	Introduction of Q1 Quarterly Focus Topic	<i>Co-Chairs</i>
9:45 – 10:30	<u>Presentation</u>	<i>Julie Tucker, USDA Forest Service</i>
10:30 – 10:40	Coffee Break	
10:40 – 11:30	<u>Presentation</u> : A conservationist’s views on enhancing US public forest resilience and fire risk reduction for many benefits to nature and society	<i>Chris Topik, The Nature Conservancy</i>
11:30 – 12:15 pm	<u>Presentation</u> : Renewable Green Power: Aligning Interests & Advancing Multiple Objectives	<i>Carlton Owen, U.S. Endowment for Forestry & Communities</i>
12:15 – 12:30	Public Comment	
12:30 – 1:30	Lunch Message from USDA	<i>Daniel Jiron, Acting Under Secretary of Natural Resources and Environment, USDA</i>
1:30 – 2:30	<u>Presentation</u> :	<i>Bob Apt, Department of Forestry and Environmental Resources, NCSU</i>
2:30 – 2:45	Subcommittee Assignments & Instructions	<i>Co-Chairs</i>
2:45 – 4:30	Subcommittee Breakouts (Coffee Break as needed)	<i>Subcommittees</i>
4:30 – 5:15	Subcommittee Day One Reports	<i>Full Committee</i>

5:15 – 5:30	BRDi Recommendations	<i>Full Committee</i>
-------------	----------------------	-----------------------

DAY 2	Technical Advisory Committee Meeting	March 28, 2019
--------------	---	-----------------------

7:30 – 8:00 am	Continental Breakfast	
----------------	-----------------------	--

8:00 – 8:30	Review of Draft Report Framework & Subcommittee Instructions	<i>Co-Chairs</i>
-------------	--	------------------

8:30 – 10:30	Subcommittee Breakouts	<i>Subcommittees</i>
--------------	------------------------	----------------------

10:30 – 10:45	Coffee Break	
---------------	--------------	--

10:45 – 12:15 pm	Subcommittee Breakout Reports, Committee Discussion, and Recommendations Vote 2019 Work Plan Discussion	<i>Full Committee</i>
------------------	--	-----------------------

12:15 – 12:30	Public Comment	
---------------	----------------	--

12:30 – 1:30	Lunch	
--------------	-------	--

1:30	Adjourn	
------	---------	--

NOTES

¹ *Full Committee Meetings, Presentations, and Public Comment Hearings are open to the public.*

² *Subcommittee Meetings are closed to the public.*

³ *Meals and Break Service are closed to the public and provided for Committee Members only.*

**DoubleTree by Hilton Washington DC-Crystal City
300 Army Navy Drive, Arlington, VA 22202**

Appendix C: Q1 Committee Recommendations

Source: Biomass R&D Technical Advisory Committee

Advisory To: Biomass R&D Board

Report Date: 3/28/2019 (Q1 2019)

Issue: *The Sense of the Committee on Opportunities for Woody Bioenergy with Healthier and Safer Forests*



Today is a period of great transition for forests, a truly unique point in history for innovative opportunities supporting sustainable management of a national resource. Important changes are needed to reduce the risk of catastrophic fires and to respond to damage from insect infestations, hurricanes, floods and other natural disasters. New thinking is evolving for using the forests responsibly as a tool for reducing carbon emissions, for improving water quality and wildlife habitats, and for new uses of forest biomass for bioenergy and bioproducts. Transforming forest management will be a massive undertaking, involving many players: governments at all levels and in their multiple organizations; many different advocacy groups and collaboratives; universities and colleges; corporations from different sectors; and, concerned private citizens. It will be both centralized and de-centralized, with no one-size solution fitting all of the problems, because of America's continental variations of geography, weather, culture, flora and fauna. In the end, this all is about rebuilding trust among all the different interests that necessary changes in forest management can and will be done responsibly for the multiple environmental services of forests: carbon mitigation; soil and water conservation; wildlife protection; recreation; new hope for embattled rural communities; and, new renewable energy advances. It is an opportunity for needed change that may never come again. This is why we deem 2019, *The Year of the Tree*.

A Conclusions of the Biomass R&D Technical Advisory Committee

- We reiterate the Committee's November 2018 recommendations calling for the U.S. Environmental Protection Agency to implement as soon as practicable the common sense reform of regulations governing the Renewable Fuel Standard to facilitate the utilization of a broad range of feedstocks, including woody biomass, while balancing environmental protections.
- We recognize the forward thinking and growing momentum behind new government approaches to forest management to reduce the risk of fire and other damages and to simultaneously open up new opportunities for woody bioenergy and bioproducts, as evidenced by recent orders issued by the President of the United States and the Governor of California.
- We intend to use our 2019 quarterly Committee meetings to examine fully the many linkages between healthy forests, the growth of the advanced woody bioenergy and bioproducts sector, and their socioeconomic impacts.
- We will listen to a wide range of outside parties and then make recommendations to Committee stakeholders on such topics as:
 - Learning from successful local partnerships that have provided new economic opportunities, especially to rural communities;
 - Integration of new bioenergy and bioproducts technologies and markets with the changing mix of traditional forest industries;
 - Bridging across governmental agencies and standardizing approaches and even, terminologies;
 - Specific woody biomass market sector analyses;

- The role of private insurance markets;
 - Understanding the failures of past efforts for woody bioenergy and better forest management;
 - Positioning within a global context; and
 - Proactive response to natural disasters for rapid recovery and for new uses and conversion technologies for forest biomass in bio-based materials, fuels and power.
- We find ourselves at a point where new technologies are emerging with potential to produce a whole new set of renewable products and energy while simultaneously delivering sustainability and carbon reduction benefits.
 - Despite economic challenges facing many traditional forest products companies, innovative, pioneering leaders within this industry have begun to explore investment opportunities for partnering in the area of energy development with potential to fundamentally transform the economics of wood-based industries.
 - Biomass technologies and product development requires high risk investments, therefore special emphasis is needed in assessing social and economic benefits these technologies could bring to forest resource management.
 - We believe our specific recommendations in federal research, policies and regulations can help advance the ongoing public conversation about safer and healthier forests and build a consensus framework for a systematic approach.

B

The Committee's Plans for the "Year of the Tree"

- The TAC proposes to organize its remaining 2019 meetings around an agenda exploring in-depth the topic of sustainable uses of forest biomass for biofuels, bio-based products and biopower.
- The TAC recognizes that the pressures facing private forest land owners differ significantly from those pressures on public lands, with further complications arising from types and amounts of forests, culture, industry and infrastructure.
- The TAC proposes to analyze both the Pacific Northwest and the Southeast U.S., particularly focusing on their unique regional characteristics, especially their emerging technologies, scale of forest biomass, environmental consideration and citizen involvement. The TAC intends to incorporate local, state and regional perspectives from public and private groups.
- Following two quarterly meetings focused on forest biomass issues and opportunities in those two key regions, the TAC intends to use the fourth quarterly meeting to synthesize our findings and to explore relevant global perspectives to form the basis for our final recommendations to the federal government.