

## 2017 W2W Meeting & Workshop May 17 Embassy Suites 100 Capital Mall, Sacramento, California

Waste to Wisdom is an innovative biomass research project led by Humboldt State University and 15 regional partners, who are building on existing research on the conversion of forest residues into renewable energy and other valuable bio-based products. Our goal is to make better use of forest residues wasted from timber harvests and thinning by using new equipment, operations, and technologies that can turn that biomass into valuable bioenergy and bio-based products.

During our one day public workshop you will have an opportunity to:

- See innovative methods and tools used to convert forest residues into high quality biomass feedstock to specifications required by different biomass conversion technologies.
- Learn how we developed a model to optimize the selection of production pathways including collection, comminution, product upgrading (moisture control, densification, and in-woods biomass conversion), and transportation to maximize net revenue.
- Hear how we scaled-up the most promising prototype units for three biomass conversion technologies — biochar production system, torrefier, and briquetter — to sizes appropriate for achieving commercialization.
- Understand how we evaluated the economic feasibility, social impacts, and ecological sustainability of implementing the proposed conversion technologies in addition to a cradle-tograve life cycle inventory for each of the individual systems.
- Participate in topic-based breakout discussions.

## **Meeting Agenda**

## Wednesday, May 17, 2017: Public Workshop

8:30am - 9:00am	Coffee, Morning Refreshments and Load Power Point Presentations
9:00am – 9:15am	Welcome and Introductions Han-Sup Han with other distinguished guests
9:15am – 10:30am	<ul> <li>Social Perceptions of Woody Biomass Waste Utilization in the Pacific Northwest - Ivan Eastin (15 min.)</li> <li>The Question isn't to burn or not to burn: it is where, when and how to burn to mitigate local and regional environmental impacts - Elaine Oneil (15 min.)</li> <li>Beneficial regional air quality impacts associated with avoided pile burns - Indroneil Ganguly (15 min.)</li> <li>Lifecycle analysis of briquetting post-harvest wood residues - Rick Bergman and Sevda Alanya-Rosenbaum (15 min.)</li> </ul>
10:30am – 10:45am	Morning Break – refreshments provided
10:45am – 12:00pm	<ul> <li>Biochar applications - Deborah Page-Dumroese (15 min.)</li> <li>An Economic Impact Analysis of collecting residual biomass for bio-based energy alternatives - Daisuke Sasatani (15 min.)</li> <li>The Economics of Waste-to-Wisdom - E.M. (Ted) Bilek (15 min.)</li> <li>Landscape modeling - integration of feedstock production, BCTs, and marketing - John Sessions (15 min.)</li> </ul> Questions and Discussions (15 min.)
12:00pm – 1:00pm	Lunch on your own
1:00pm – 2:00pm	<ul> <li>Production of quality feedstock from forest residues: sorting, comminution, screening - Han-Sup Han (30 min.)</li> <li>Development of baling technologies - Jim Dooley (20 min.)</li> <li>Questions and Discussions (10 min.)</li> </ul>
2:00pm – 2:15pm	Afternoon Break – refreshments provided
2:15pm – 3:30pm	Biomass conversion technologies: System performance, case studies, and implications for California's forest management - Arne Jacobson and David Carter (60 min.)  Questions and Discussions (15 min.)
3:30pm – 4:45pm	Topic-Based Breakout Discussions Waste to Wisdom and Rural Communities Energy Initiative Groups in California
4:45pm – 5:00pm	Closing Comments