



Action Initiative Information			
Cluster:	Renewable Energy Seed Industry Cluster Working group		
Initiative #4:	Wood 2 Energy Demand Development Initiative (Formerly titled, Support Biomass Energy Demand Development in Southeast Alaska)		
Goal:	The goal of this initiative is to identify a transition strategy to biomass energy to complement our hydroelectric energy supply. The specific objective of this initiative is to 'Replace 30% of heating oil usage with renewable biomass fuel within the next ten years.' What this initiative will NOT be focusing on is the biomass supply side of the equation.		
Champion:	Bob Deering Dan Parrent	rcdeering@gmail.com djparrent@fs.fed.us	(907) 957-1077 (907) 743-9467
Team:	Alec Mesdag alec.mesdag@aelp.com Alice Edwards alice.edwards@alaska.gov Allen Brackley abrackley@fs.fed.us Andrew Gamble Bill Leighty wleighty@earthlink.net Bob Claus bob@seacc.org Brad Ewing bradewing@gmail.com Brian Kleinhenz brian.kleinhenz@sealaska.com Darsie Culbeck dculbeck@haines.ak.us David Harris dpharris@fs.fed.us Elaine Price elaine@seconference.org Erica Hupp Eva Bornstein ebornstein@jedc.org Jessica Beck jessica_beck@ci.juneau.ak.u Jim Penor jim.penor@ci.juneau.ak.us Joanne Wiita jwiita@thrha.org Keith Rush krush@tnc.org Norman Cohen ncohen@tnc.org Pierre Khalil pierre.c.khalil@uscg.mil Ray Wilson Teresa Haugh taugh@fs.fed.us Trevor Sande trevorsande@rmketchikan.com Wendy Zirngibl wmzirngibl@fs.fed.us Weston Eiler weston_eiler@legis.state.ak.us Zach Wilkinson zwilkinson@jedc.org		

Southeast Cluster Initiative
 Action Initiative Status Report
 December 2012



	Al Roskam Brian Hirsch Cindy Bremner Duff Mitchell Jess Daniels Karen Petersen Maxine Thompson Richard George Larry Dunham Misty Smith Devany Plentovich	akpelletsupply@gmail.com Brian.Hirsch@nrel.gov mayor.bremner@yakutatak.us duff.mitchell@juneauhydro.com danielsj33@hotmail.com khpetersen@alaska.edu twodmax26@aol.com rwgeorge99820@hotmail.com
--	--	---

Meeting Summaries		
Date:	Attendees:	Outcome
12/19/12 CWG Meeting	Bill Leighty Angel Drobnica Bob Deering Brian Holst Zach Wilkinson Nathan Soboleff Merrill Sanford Wendy Zirngible Kirk Hardcastle Alec Mesdag Pierre Khalil Bob Loescher Larry Miles Duff Mitchel Dan Parrent Clarence Clark Dave Harris Deveny Plentovich Al Roskam Shaina Kilcoyne Al Brackly Renne Claggett	<p>Bob Deering and Dan Parrent are co-champions for this effort. Bob was present in person and Dan called in from Anchorage. Bob gave an extensive update on the progress of the new Wood 2 Energy Demand Development Initiative, beginning with his temporary position at the Forest Service, the most recent Wood 2 Energy kick-off meeting that was held in November 2012, and the vision of the initiative group (30% thermal energy conversion from oil to wood energy over the next ten years). Bob also described the implementation “roadmap” project, and the process that is being employed to develop the roadmap including a series of upcoming focus group meetings for various critical business and policy sectors. In addition Bob gave updates on recent and near term wood energy conversion projects around the region in areas such as Ketchikan and Haines. Feel free to contact JEDC, Bob Deering or Dan Parrent for more info about this initiative.</p>



<p>11/29/12</p>	<p>Alec Mesdag Alice Edwards Allen Brackley Bill Leighty Bob Claus Bob Deering Brad Ewing Brian Kleinhenz Dan Parrent Darsie Culbeck David Harris Elaine Price Erica Hupp Eva Bornstein, Jessica Beck Jim Penor Joanne Wiita Pierre Khalil Teresa Haugh Zach Wilkinson Karen Petersen Larry Dunham Misty Smith Devany Plentovich Nathan Ratz</p>	<p>The purpose of day two of the Southeast Alaska Wood-to-Energy Planning Workgroup meeting was to discuss the sectors to be engaged in developing the roadmap to biomass energy implementation. The sectors discussed were the following:</p> <ol style="list-style-type: none"> 1. Financing 2. Facility Management 3. Engineering/Technical Support 4. Permitting/Regulatory 5. Environmental/Sustainability 6. System Supply/Installation 7. Fuel Supply 8. Transportation/Storage/Distribution 9. Education/Public Outreach 10. Policy Development <p>The following questions were applied to each sector. Discussion notes follow:</p> <ul style="list-style-type: none"> ○ Content – What comprises each Sector? ○ Members – Who represents these Sectors? ○ Market Opportunities – What business opportunities exist for each Sector? ○ Barriers & Challenges? ○ Sector Data Acquisition – What information do we need to capture for the Sectors, and how? <p>The following are the combined bulleted notes of the input that was captured from the attendees at the meeting, broken down by sector.</p> <p><u>Financing</u></p> <ul style="list-style-type: none"> • Property Tax Incentives or State Tax incentives • State Loan Program <ul style="list-style-type: none"> ○ Alternative Energy Conservation Loan Fund (AECLF) ○ 50k limit? ○ State has new program – loans for businesses to
-----------------	--	---



		<p>make renewable energy conversions – alternative energy conservation loan fund – Dept of Commerce loan program</p> <ul style="list-style-type: none"> ○ What is available for fed, state and local programs? • Performance Contracting <ul style="list-style-type: none"> ○ Way of borrowing money from the private sector • Bulk Fuel Loan Program for wood <ul style="list-style-type: none"> ○ State bulk fuel loan program is for petroleum only ○ Small Village Cash flow issue • Energy Services Contractors (ESCO's) • In some countries boiler is owned by utility – could be model for SE • Barriers for Low income Residential <ul style="list-style-type: none"> ○ AHFC? ○ AHFC weatherization program does not allow replacement of one system by another • Politicos / Cash Flow from Policy • Layers of restrictions/incentives when use several financing programs – complicates ownership – makes projects difficult to complete – and even begin • Public Interest Energy Research – CA program could be a model • Permits • Energy Trust of Oregon – consider this Model – Alec has contacts • RDL “RED LEG” USDA Rural Development –need more research <ul style="list-style-type: none"> ○ Rural Electric programs – RDLG? No interest loan program from? • Local Banks • Credit Unions • Oregon – Umpqua Bank-find a contact, has experience, talk
--	--	--



		<p>to Alec</p> <ul style="list-style-type: none"> • Who should participate? <ul style="list-style-type: none"> ○ Misty Smith ○ Jim Strandberg ○ Banks ○ USDA Loan Program ○ State Bonding ○ AHFC ○ DCCED ○ Appraisers ○ Rural Cap ○ US DOE / NREL ○ Banks and appraisers, USDA/NREL, AHFC, DCCED, State and Federal delegation, State department of commerce, rural cap • USDA source of financing used by Ketchikan <p><u>Facilities Management</u></p> <ul style="list-style-type: none"> • What matters to the facility operator? • Who pays the Bills? <ul style="list-style-type: none"> ○ Big facility operators may not see the energy bill • Experienced Operators / current Operators <ul style="list-style-type: none"> ○ Learn from others Mistakes ○ Want operators that have experience with running these systems • User Friendly equipment/service <ul style="list-style-type: none"> ○ Systems need to become plug and play • Should this be a separate sector? Yes need to address their concerns – need to know what these are • AHFC and AK Association of Housing – create a pool of experienced people who operate these systems • Need to develop expertise in wood pellet repair
--	--	--



		<ul style="list-style-type: none"> • Design – to contractor - to facility manager need a feedback loop • Decision making Process / People • Workforce development <ul style="list-style-type: none"> ○ Training ○ Maintenance • Technical Support / Education • Experience Sharing • Education • Service • “Need to know” info • Biomass Users group meeting? • Social Media • Village Champion training <ul style="list-style-type: none"> ○ Doe/AEA/City of Tanana • Industry tradeshow and conferences <ul style="list-style-type: none"> ○ Networking and education • De-Mystify the operations process • Purpose of this sector - Identify information that owners need to know to create educational piece – gather lessons learned from facility managers that run biomass facilities • Who should be involved <ul style="list-style-type: none"> ○ Deana Strait <ul style="list-style-type: none"> ▪ AHFC ○ Public works directors ○ Fuels for school annual meeting ○ Fuels for schools – held annual meetings for facility directors to talk about challenges – create biomass users group ○ Facility managers are not the decision makers to install the biomass systems – need information for those that are making the decisions to convert – this
--	--	--



		<p>roadmap intends to provide that information</p> <ul style="list-style-type: none"> ○ Village Champion training program has this information – needs to be pull together into a document – City of Tanana with DOE and AEA funding <p><u>Engineering / Technical Support</u></p> <ul style="list-style-type: none"> • SE limited in engineers with biomass experience – big players are after bigger projects – maybe the Willoughby District • ESCOS – After Big Projects <ul style="list-style-type: none"> ○ Siemens • Engineering Options for Decision makers • Standards/Consistency • Good case Studies • Cost Effective Data Capture - ACEP <ul style="list-style-type: none"> ○ Funding for Data Capture • Equipment Suppliers • Mechanical Contractors • Building Codes • Market Opportunity – seed industry cluster working group • Who needs to be involved? <ul style="list-style-type: none"> ○ Engineering firms already engaged in AK ○ AE&E – specialize in simple conversions ○ Kaufman Engineering ○ Murray and associates ○ Tetrattech ○ AK Energy Engineering (J Reified) ○ Alaska Energy and Engineering <ul style="list-style-type: none"> ▪ Steve Seisel ▪ Brian Grey • Feasibility of different systems – studies use different
--	--	--



		<p>assumption – standardization needed</p> <ul style="list-style-type: none"> • Capture data as projects go in – but capturing data adds expenses to the system that can make it too expensive – AEA working with UAF to fund data capture separately • Education component needed for engineers new to biomass • City building codes are outdated for modern pellet systems – based on old wood stoves <p><u>Permitting and regulatory</u></p> <ul style="list-style-type: none"> • Building Codes • Fire Codes • Air Emissions Issues • Fire marshal • Boiler / project size effects permitting <ul style="list-style-type: none"> ○ Cheat sheet or flow chart related to permitting based on size of project ○ need flow chart of who to talk to for permits • Who needs to be involved? <ul style="list-style-type: none"> ○ Building code officials ○ Fire marshals need to be involved early ○ ADEC air permitting • Permitting thresholds can trigger added expenses <p><u>Environmental / Sustainability</u></p> <ul style="list-style-type: none"> • Should not combine with permitting – sustainability is a different issue relating to supply • Need to define sustainability? Carbon emissions/air quality issues are regulatory also – don’t want to degrade air quality to point where get into regulations • Geography/topography, weather, size of units, quality of equipment all affect air quality/emissions – if do a good job of education do not need regulation • Cordwood systems – is a local supply issue and need to address sustainability of this resource cordwood only
--	--	---



		<p>appropriate for communities that have the resource</p> <ul style="list-style-type: none"> • burning inappropriate materials is environmental concern <ul style="list-style-type: none"> ○ Burning of inappropriate materials (education) • Non Pellet – local supply sustainability issue (cord wood) <ul style="list-style-type: none"> ○ Poaching becomes a problem where cordwood resources are limited • Air Quality • Market / Economics • *Proactive – environmental to avoid regulatory problems • Balanced air quality / biomass conversion plan • Business risk – Sustainability • Who is the opposition (education) look at who is opposing biomass and why – to create educational piece on environmental – need to know what the public is thinking – is it health/safety concerns, environmental concerns? • Present Biomass is a transitional technology – for next 50 years • How best to capture public perceptions? Are there surveys? • Are there concerns about sustainability of supply? Need to quantify availability of supply – break out by type of biomass fuel • Al Brackley and Brian Kleinhenz could provide position statement on supply availability from Tongass – SE fuel independence is possible from Tongass <ul style="list-style-type: none"> ○ Brian and Al can write a paper about sustainability to address that issue ○ Sustainability is case by case depending on fuel form –be specific ○ We must address the local supply issue rather than “not going there” ○ Fuel Supply Sustainability ○ Unbiased data and success stories ○ Credible Data
--	--	---



		<ul style="list-style-type: none"> ○ Accurate Quantification • Local supply programs – fed micro sales • Managing public expectations • Energy Efficiency • Public Perception • Should we question 30% reduction used in IRP? • Commercial sector is only 40% of fuel use. All programs so far are focused on this sector. Will not get to 30% if focus only on commercial sector • Should we combine this sector with public outreach/education? • Sustainability needs a database on fiber source – to demonstrate that there is available supply • Bring in environmental organizations to help deliver sustainability message – and to get sustainability questions/hurdles • Conservation Organizations involved <p><u>Fuel Supply</u></p> <ul style="list-style-type: none"> • Short term – Supply from anywhere • Long Term – Local Supply <ul style="list-style-type: none"> ○ Short term is to find supply anywhere – long term is to generate it locally • Infrastructure /transportation / logistics <ul style="list-style-type: none"> ○ Need transportation and distribution system and have storage issues • *Must address the local supply issue • Retail Supply • Bulk delivered • Cordwood • Bricks • Fuel Supply V.S. Timber Supply
--	--	--



		<ul style="list-style-type: none"> • Wood Chips – Commercial only <ul style="list-style-type: none"> ○ Chips supply – not used for residential – commercial or large institutional only • Micro chips • Fuel Quality and Moisture <ul style="list-style-type: none"> ○ Quality – moisture is issue in SE, storage affects moisture • Cordwood market supply, brickets <p><u>Transportation / Storage and Distribution</u></p> <ul style="list-style-type: none"> • Transportation is huge cost <ul style="list-style-type: none"> ○ And a market opportunity for someone ○ Pellets – One third of cost embedded is transportation of bringing in supply – driver for locally sourced supply • Limited number of Barge Lines • Inter-regional transportation vs. Outside <ul style="list-style-type: none"> ○ Barging costs need to be looked at community to community – should the ferry system be involved? ○ Expensive part is getting it on a barge – moving it around regionally is just as expensive as bringing it up from down south – limited barge lines in region – Petromarine has its own barges for bringing in fuel • Ferry System <ul style="list-style-type: none"> ○ Rates? ○ Routes? • Identify Challenges • Back haul opportunities coming North into SE <ul style="list-style-type: none"> ○ Transportation is a hurdle that needs to be solved – southeast solid waste authority has put out an RFP for contract to ship waste out of SE for its members – containers will be empty coming back to region ○ Chips will be coming to Juneau in containers that take metal recycling? out –
--	--	--



		<ul style="list-style-type: none"> ○ Allied Republic <ul style="list-style-type: none"> ▪ Matt Henry ▪ Rick Franklin ▪ Get contact for above via Jim Penor ○ Waste wood recycler ○ Solid waste authority – has been funded by legislature for last three years - could be model for a wood fuel authority? • Facility managers want assurance that fuel supply is available when need to resupply • Chips will be coming to Juneau in containers that take metal recycling out • Storage Bulk <ul style="list-style-type: none"> ○ Silos ○ Dry • Cord Wood <ul style="list-style-type: none"> ○ Moisture ○ Storage ○ Seasoning • Water front access for barges <ul style="list-style-type: none"> ○ Bringing supply in requires marine access – Juneau could make land available to bring a barge in and store fuel need to survey other communities for what they have available • Land/space for storage • Transportation for current fuel oil suppliers <ul style="list-style-type: none"> ○ Petro marine • Ward Cove <ul style="list-style-type: none"> ○ Regional Storage? • People <ul style="list-style-type: none"> ○ Steve Sealy
--	--	--



		<ul style="list-style-type: none"> ○ AML ○ Channel Construction ○ Petro marine <ul style="list-style-type: none"> ▪ Bring in Petro marine – could be just another fuel type for them but without spill cleanup issues that petro fuel has <p><u>Policy Development</u></p> <ul style="list-style-type: none"> • Property or state tax incentives • Bulk fuel loan program for word <ul style="list-style-type: none"> ○ Village cash flow issue • Permits Building codes • DCCED • Public works directors association? • Commission on sustainability • Cultural sensitivity • Department od Education • Municipal league of cities • Southeast Conference • Private Sector <ul style="list-style-type: none"> ○ Suppliers ○ Business Development / JEDC/ SEDC (Sitka)/ SEDC (Skagway)/ other economic development orgs in the region • Local Chambers of Commerce • Native Corporations • Environmental Conservation Orgs • DNR / Forestry • Elected officials – staffers • Traditional Clan Leaders (Joanne) • Revolving Loan Fund?
--	--	--



		<ul style="list-style-type: none"> ○ Revolving loan fund for stove change out • Policy to <u>require</u> <i>consideration</i> of Biomass as a heating option tied to <ul style="list-style-type: none"> ○ Funding or ○ Loan programs <ul style="list-style-type: none"> ▪ Mandate that Biomass should be looked at as an alternative in new construction at the state level – and in order to get state money • Packets of Pellets on Legislative Desks • Who <ul style="list-style-type: none"> ○ State ○ Fed ○ City ○ Village ○ Tribal ○ DCCED, Forest Service, associations, JCOS, state department of education, Alaska municipal league, chambers of commerce, SEC, fuel suppliers, JEDC, SEDA, Skagway EDC, Carol Rushmore (Wrangell), Ketchikan?, Tribal corporations, DNR forestry, elected delegation, mayors and city elected officials, traditional clan leaders, state tribal specialist Lillian? <p><u>Education and Public Outreach</u></p> <ul style="list-style-type: none"> • Website – forest Service <ul style="list-style-type: none"> ○ Website development needed to reach out and provide information • Social Media (Dan Tweeting) • Home show • Traveling Roadshow outreach • Community Workshops on pellet stoves • Success Stories • Energy Workshops
--	--	--



		<ul style="list-style-type: none"> • Work through local utilities (AELP, AP&E) • JEDC – Newsletter • Get on the agenda for meetings of facility owners, chambers of commerce – need a calendar of these events <ul style="list-style-type: none"> ○ Education – School boards ○ School superintendents / Hospital directors ○ Chambers / Econ Development orgs ○ Ketchikan Hospital Expansion • “Message”? What are we going to present? Financial justification given future oil prices. Success stories, inform on roadmap project <ul style="list-style-type: none"> ○ Is it consistent ○ Should it be refined? ○ What is it exactly? ○ Important Component top successful plan • WHO <ul style="list-style-type: none"> ○ DEC ○ DNR ○ AEA ○ REAP ○ Cluster Working Groups ○ Tribal Department of Energy <ul style="list-style-type: none"> ▪ Trace Lebough (spelling?) ▪ Pillar Thomas ○ NREL <ul style="list-style-type: none"> ▪ Brian Hirsch ▪ Lezana Pierce <p><u>System Supply and Installation</u></p> <ul style="list-style-type: none"> • Limited Suppliers / technicians in the region <ul style="list-style-type: none"> ○ Limited sales and service for pellet stoves in smaller communities – barrier for residential market
--	--	--



		<ul style="list-style-type: none"> ○ Pellet boiler - Haines has a new office for business called Pacific Rim Mechanical – have seen a business opportunity in SE • State Legislative help – (stimulate) <ul style="list-style-type: none"> ○ Can state help get local market going by having a supply for sale? Valdez has an initiative to buy pellet stoves in bulk at a discount and pellets, too. Could be a model • What are barriers to local businesses picking up a line of pellet stoves to sell? But businesses need to carry stoves with a range of options, including programmable thermostats, not just basic models • Many grades or variations of equipment- consumers need to be educated • * Consumer education & data about equipment <ul style="list-style-type: none"> ○ Commercial / government sector ○ Boiler database <ul style="list-style-type: none"> ▪ In 40% commercial sector – what is low hanging fruit? Is it government installations? State has a database of all boilers in state – SE has 1600 boilers – 500 are more than 20 years old and approx.. 300 are 30 years old. This is the low hanging fruit. ○ Education is needed for consumer on the stove features, brands and options to make an educated purchase. Burden of research is on the consumer. • Dealers/ manufacturers/ Distributors of Equipment • Local Dealerships • Residential market - not replacing boilers but adding room space heating ie Toyo market - this is low hanging fruit – barrier to entry for these systems is low <ul style="list-style-type: none"> ○ “Converting one room at a time” – Toyo stove “model” for pellet stoves • Home builders – educate that this as an option for installing in new construction
--	--	---



		<ul style="list-style-type: none"> ○ Building codes <ul style="list-style-type: none"> ▪ Modify building codes to require biomass heating system in all construction ○ Hydronic heating systems • Who needs to be involved? Manufacturers - Alaska is the big market for manufacturers • John Crouch – responsible wood burning presentation– can educate on options, but only if the product is sold by a member of his association <p><u>Other</u></p> <ul style="list-style-type: none"> • Education • Perceived barriers from owners standpoint (property owners or facility managers) <ul style="list-style-type: none"> ○ Joanne list (Wendy) ○ Simple Clear message ○ Easily consumable message ○ Boiler data ○ Relevance • Is 30% the right number? • Brad Ewing/JEDC putting database together about fuel usage by community Transportation, heating, electric • CHP opportunities – Juneau’s Willoughby district, AELP biomass system for electricity can be also a district thermal distribution system • CHP opportunities could also encompass fish waste and geothermal • Prioritization of sectors: • Accurate and credible data on cost of operations and maintenance, liability and safety, how to store biomass? • Need simple presentation for outreach that targets barriers • Boiler replacement return on investment calculations needed for the boilers identified in the boiler database that are due for replacement – can champion for replacement
--	--	---



		<p>with this data</p> <ul style="list-style-type: none"> Case studies and personal stories - need to be presented in a way that decision makers can understand what's in it for them – how to message is key – use professionals
<p>11/28/12</p>	<p>Alec Mesdag Alice Edwards Allen Brackley Andrew Gamble Bill Leighty Bob Claus Bob Deering Brad Ewing Brian Kleinhenz, Dan Parrent Darsie Culbeck David Harris Elaine Price Erica Hupp Eva Bornstein Jessica Beck Jim Penor Joanne Wiita Keith Rush Norman Cohen Pierre Khalil Ray Wilson Teresa Haugh Trevor Sande Wendy Zirngibl Weston Eiler Zach Wilkinson Al Roskam Brian Hirsch Cindy Bremner Duff Mitchell Jess Daniels Karen Petersen Maxine Thompson Richard George Larry Dunham Misty Smith</p>	<p>This meeting of the Southeast Alaska Wood-to-Energy Planning Workgroup was held Wednesday, November 28, from 1:00PM to 5:00PM and Thursday, November 29, from 8:00AM to noon. It was organized with resources provided under a contract with the USDA Forest Service and executed by the Juneau Economic Development Council.</p> <p>Background</p> <p>Development of a Southeast Alaska Biomass Strategic Plan is based on the unification of two Action Initiatives developed through the Southeast Alaska Cluster Initiative: the Forest Products CWG Action Initiative #6, Substitute Biomass for Diesel to Meet Energy Needs of Southeast Alaska and the Renewable Energy Seed CWG Action Initiative #6, Support Biomass Energy Demand Development in Southeast Alaska. These two action initiatives have merged into one initiative to develop a strategic plan, reflecting priorities and steps needed to achieve broad biomass energy implementation in Southeast Alaska. Bob Deering and Dan Parrent, with funding by the USDA Forest Service, co-chair this initiative.</p> <p>Meeting Process</p> <p>Zach Wilkinson of the Juneau Economic Development Council (JEDC), opened the meeting with introductions and provided background on the Southeast Cluster Initiative and this effort.</p> <p>The goal of this meeting was to review the vision statement and strategic goals for displacement of oil with biomass, review sectors to be engaged in the plan, discuss the challenges, opportunities and participants to be engaged in each sector and decide on next steps. Sectors considered could include financing, facility management, engineering and technical support, permitting and regulation, environment/sustainability, system supply/installation, fuel supply, transportation/storage/distribution, education/public outreach, policy development.</p> <p>Day 1: Meeting Discussion Notes</p>



	<p>Devany Plentovich</p>	<p><u>Vision Statement:</u></p> <p><i>We propose that 30% of all thermal energy currently derived from fossil fuels in Southeast Alaska be met with renewable biomass in ten years and that an additional 2% be met each year thereafter to the extent sustainable by regional resources.</i></p> <p><u>Discussion:</u></p> <ul style="list-style-type: none"> • 30% of thermal energy is equivalent to displacement of 6.6 million gallons of fuel oil. This is approximately the equivalent of 150,000 tons of green wood, or 60,000 tons of pellets. • Logging residues and young growth are more than sufficient to meet that level of demand from within the region if local supply were developed. • 40% of thermal energy is consumed by the commercial sector and 60% in the residential sector. A suggestion was made to create separate commercial and residential goals within the vision statement. It was decided to keep the vision broad but to address this in the implementation plan. • Scale of displacement of 6.6 million gallons of fuel oil is equivalent to about 10 projects the size of the Tok school – which is one of the largest projects in the state to date and has displaced 60,000 gallons of oil per year. • 30% is a good goal, don't need 2% added after that. • Vision statement should say that any public building built in SE should consider a biomass option in payback calculations. <p><u>Long-term Outcomes:</u></p> <ol style="list-style-type: none"> 1. <i>Lower energy costs</i> 2. <i>Preserve hydroelectric capacity - use electricity to power economic development and transportation rather than heat</i> 3. <i>Grow regional biomass demand – to justify development of regional biomass fuel production capability</i> 4. <i>Strengthen regional economy – spend energy dollars locally</i>
--	--------------------------	---



		<p>5. <i>Create local jobs and support healthy communities</i></p> <p>6. <i>Reduce carbon emissions – biomass carbon ‘advantaged’</i></p> <p>7. <i>Complement related efforts – biomass development plays supportive role to other endeavors such as forest products, forest habitat enhancement, urban planning & development, etc.</i></p> <p>8. <i>Recognize biomass as a legitimate component of Southeast Alaska’s energy portfolio</i></p> <p><u>Discussion:</u></p> <ul style="list-style-type: none"> • If 30% of thermal energy demand switched from fuel oil to electric in Juneau, AELP could not meet that demand without Lake Dorothy Phase 2 – leading to higher electric rates. • Electric generation from our hydro resource is best used for displacing gasoline through electric cars - because they use electricity for power generation more efficiently than gasoline – rather than for converting oil heating systems to electric. Electric heating is the least efficient way to heat a house. • Education will be needed that hydro is for electricity needs and biomass is for thermal heating. • New construction can use heat pumps, but retrofits cannot because internal heat distribution systems that currently use fuel oil require higher heat than provided by heat pumps. • The biomass roadmap will include a recommended a list of boiler conversion projects in SE to reach the 30% goal. It is estimated that a capital investment of \$100 million dollars is needed to get to 30% conversion to biomass. • The cost advantage to making pellets locally is that don’t have transportation costs. Exporting pellets from region has a cost disadvantage due to shipping costs. Local production has no quality issues, but needs more drying. This adds to export cost disadvantage. • The goal of the initiative is to increase demand. Even with imported supply the region will still benefit from reduced
--	--	--

Southeast Cluster Initiative
 Action Initiative Status Report
 December 2012



		<p>heating costs.</p> <ul style="list-style-type: none"> • Particulate matter can create air quality issues. For 30% conversion – need to consider air quality issues closely. The technology available to remove particulate matter lends itself to larger installations and is not cost effective for residential use. • The biomass roadmap will need to quantify reduced carbon emissions. A carbon analysis by the Nature Conservancy for POW found carbon savings for biomass utilization versus bringing fossil fuel to the region. • Communities need help valuing auxiliary costs (i.e. removing underground storage tanks) into payback and determining tipping points such as buying in larger quantity and putting in a storage tank. • Biomass shift will create a business opportunity to sell pellets.
11/20/12	Bob Deering Dan Parrent Zach Wilkinson	Strategic planning meeting planning meeting
10/26/12	Bob Deering Dan Parrent Zach Wilkinson	Strategic planning meeting planning meeting
10/24/12	Bob Deering Dan Parrent Zach Wilkinson	Strategic planning meeting planning meeting
8/29/12 CWG Meeting	Bill Leighty Robert Venables Angel Drobnica Bart Watson Milt Barker Bob Deering Mike Goldstein Brian Holst Zach Wilkinson	Progress has been made on this initiative in the form of Bob’s new position at the forest service to support biomass energy demand in Southeast Alaska.
9/10/12	Bob Deering Zach Wilkinson	Bob and Zach met to discuss steps to moving forward. Results of this discussion are below



		<ol style="list-style-type: none"> 1. We will wait for the comprehensive energy demand document that is expected to come out of the AI#3 in the near future and leverage that to analyze the opportunity of energy that can be replaced with pellets 2. Bob has a meeting with the forest service on September 24th, following that meeting we will meet again to discuss how we should collaborate based on how his role there is defined. 3. JEDC will assist Bob with organizing and facilitating a meeting of a “steering” committee for Wood pellets in SE AK. This committee will be made up of direct stakeholders such as business that sell pellets, pellet stoves, or boilers, facilities that currently use pellets, facilities that could potentially use pellets, and business that might service pellet boilers. Bob is working on the list of people. When the list seems complete, we will meet again (most likely after the meeting on the 24th) to work out the details of who is invited. We both agree that this should be a small group.
9/7/12	Bob Deering Zach Wilkinson Brian Holst Jon Martin	We had a discussion involving how this initiative will move forward with regards to Bob Deering’s new role at the forest service. It was established that this initiative will continue to be associated with the RE CWG and that Bob will leverage the assistance of the Cluster working group and the JEDC. Bob discussed the need to examine current demand that could be replaced by pellets in the region, putting together a steering committee, and a list of boilers in the state that could be potentials for replacement.

Initiative Action Plan Update		
Activity 1:	Secure Bob Deering in a one year full time assignment dedicated to this effort	Activity Date:
Completed.		10/2012
Activity 2:	Hold a Kick-off meeting for Wood 2 Energy initiative and gain strategic planning information from the group	Activity Date:

Southeast Cluster Initiative
 Action Initiative Status Report
 December 2012



Completed. Report of this meeting is included in notes above		11/28-29/2012
Activity 3:	Identify Key focus group “sectors” and hold meetings with people from those sectors to gain detailed understanding of the opportunities and challenges	Activity Date:
<p>Initially we developed the following list of sector focus groups:</p> <ol style="list-style-type: none"> 1. Financing 2. Facility Management 3. Engineering/Technical Support 4. Permitting/Regulatory 5. Environmental/Sustainability 6. System Supply/Installation 7. Fuel Supply 8. Transportation/Storage/Distribution 9. Education/Public Outreach <p>Policy Development</p> <p>These have been further refined to the following:</p> <ol style="list-style-type: none"> 1. Financing 2. Technical Sector/Facilities Managers 3. Logistics and Infrastructure 4. Environmental 5. Education, Outreach, and Public Policy <p>Meetings will be scheduled and held for each of these sectors</p>		
Activity 4:	Financing Sector Focus group meeting	Activity Date:
Scheduled for 2/13/13		2/13/2013
Activity 5:	Technical/ Facilities Managers Focus Group Meeting	Activity Date:
Scheduled for 2/28/13		2/28/2013



		(tentative)
Activity 6:	Logistics and Infrastructure Focus group meeting	Activity Date:
	No work completed on this activity to date.	
Activity 7:	Environmental Sector Focus Group meeting	Activity Date:
	No work completed on this activity to date.	
Activity 8:	Education, Outreach, Public Policy Focus Group Meeting	Activity Date:
	No work completed on this activity to date.	
Activity 9:	Completion of Strategic Implementation plan, or “Roadmap”	Activity Date:
	No work completed on this activity to date.	
Activity 10:	Begin Implementation phase	Activity Date:
	No work completed on this activity to date.	

Other Informational Items

This initiative has evolved over the time it has been active. Significant milestones to note have been the US Forest Service hiring Bob Deering on a temporary assignment from his regular position at the US Coast Guard to complete a strategic plan, or roadmap. In addition, the US Forest Service has allocated some of Dan Parent’s time to this effort. This group has re-titled itself the “Wood 2 Energy Initiative” (W2E). The goal of the initiative has been more clearly defined as reflected in the Goal section above. The details of this goal are based in part on the results of the Southeast Alaska Integrated Resource Plan Findings. Based on these changes, the initiative action steps or “Activities” have also been redefined as reflected above.