

Wood Energy for Ski Areas and Mountain Towns



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Outline

- The opportunity
- Who is doing it
- Taking it further



Wood-chip district heating system, Burns, OR. Wisewood Energy.
Photo credit: Marcus Kauffman, Oregon Dept of Forestry

The opportunity for ski areas and mountain towns



SUSTAINABILITY INITIATIVES

- > 75% of ski areas have a sustainability program in place.
- Visitors place a high priority on environmental concerns.
- Renewable energy is least represented strategy, but fastest growing.



“It’s a win-win for all – we’re working with local **businesses**, lowering our **carbon** footprint, and doing something that supports our **livelihood** in the face of **wildfire** and **climate change**.”

- Dave Scanlan, former General Manager
Mt. Abram ski resort, Maine

From the
California Ski Industry Association:

ENVIRONMENTAL STEWARDSHIP

The mountains and winter are the ski industry's livelihood and passion. The mountain environments in which California and Nevada ski resorts operate are essential to both our business and outdoor recreation.



Wood energy systems at ski resorts and mountain towns

Operating

- Bridger Bowl, MT
- Mt Abram, ME
- Bridgeport Road Shop, Mono County, CA

Under Construction

- Red Lodge Mountain, MT

Exploring

- Northstar Community Services District, CA

Previous Assessments in CA

- Sierra-at-Tahoe, CA
- Mammoth, CA
- Lake Tahoe Basin/Placer County, CA
- others



Cordwood boiler at Bridger Bowl Ski Area, Bozeman, MT.

Taking it further

- Review previous assessments
- R5 USFS Wood and Biomass Utilization Program, Larry Swan
- FREE individual/regional/sector-based project scoping and development assistance - National Wood Energy Technical Assistance Team, USFS
- USFS Community Wood Energy and Wood Innovation Grants



Taking it further

- National Ski Area Association
- state/regional ski associations
- sustainability offices and initiatives
- USFS permit managers and Winter Sports staff

RENEWABLE WOOD HEAT:

Warm Toes & Healthy Forests

Resorts Turn to Affordable & Sustainable Heat Source

BY JULIE KIES, USDA FOREST SERVICE

USDA
United States Department of Agriculture

RENEWABLE WOOD ENERGY
Enhancing forest and community sustainability

Wood energy is a smart choice for mountain towns and resorts to displace fossil fuels and promote sustainable management of surrounding forests.

More than 600 facilities across the U.S. in the commercial, industrial, and institutional sectors heat, cool or power with wood leftovers that would otherwise be open pile burned or landfilled.

BENEFITS

- Local
- Clean
- Efficient
- Lower energy costs
- Low carbon or carbon neutral
- Support forest management and wildfire mitigation

Wood-chip district heating system, Burns, OR.
Photo credit: Marcus Kauffman, Oregon Dept of Forestry

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- Dave Scallan, former General Manager, Mt. Abram

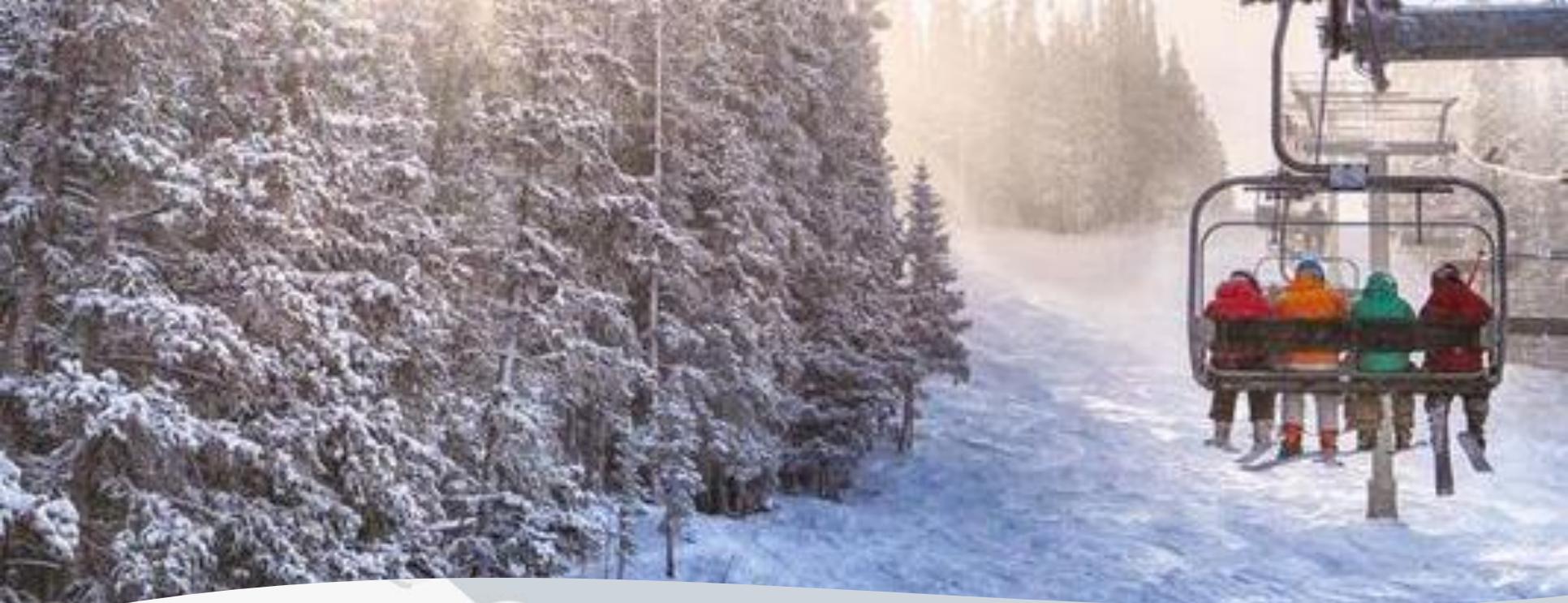
Committed to sustainability—these resorts are taking the lead with renewable wood energy:

- **Mt. Abram, Maine** has a progressive sustainability portfolio that includes a wood pellet heating system at their lodge that displaces #2 heating oil and a solar array.
- **Bridger Bowl, Montana** installed a high-efficiency cordwood boiler in 2016 that heats with beetle-killed timber removed by the summer maintenance crew.
- **Red Lodge Mountain, Montana** is installing a system that will use wood generated from ongoing forest management on their ski hill to heat their base lodge.

Red Lodge Mountain will heat with forest thinnings.
Photo credit: Red Lodge Mountain

Free project scoping, technical assistance, feasibility studies and grants are available.
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