

Renewable Energy & Healthy Homes

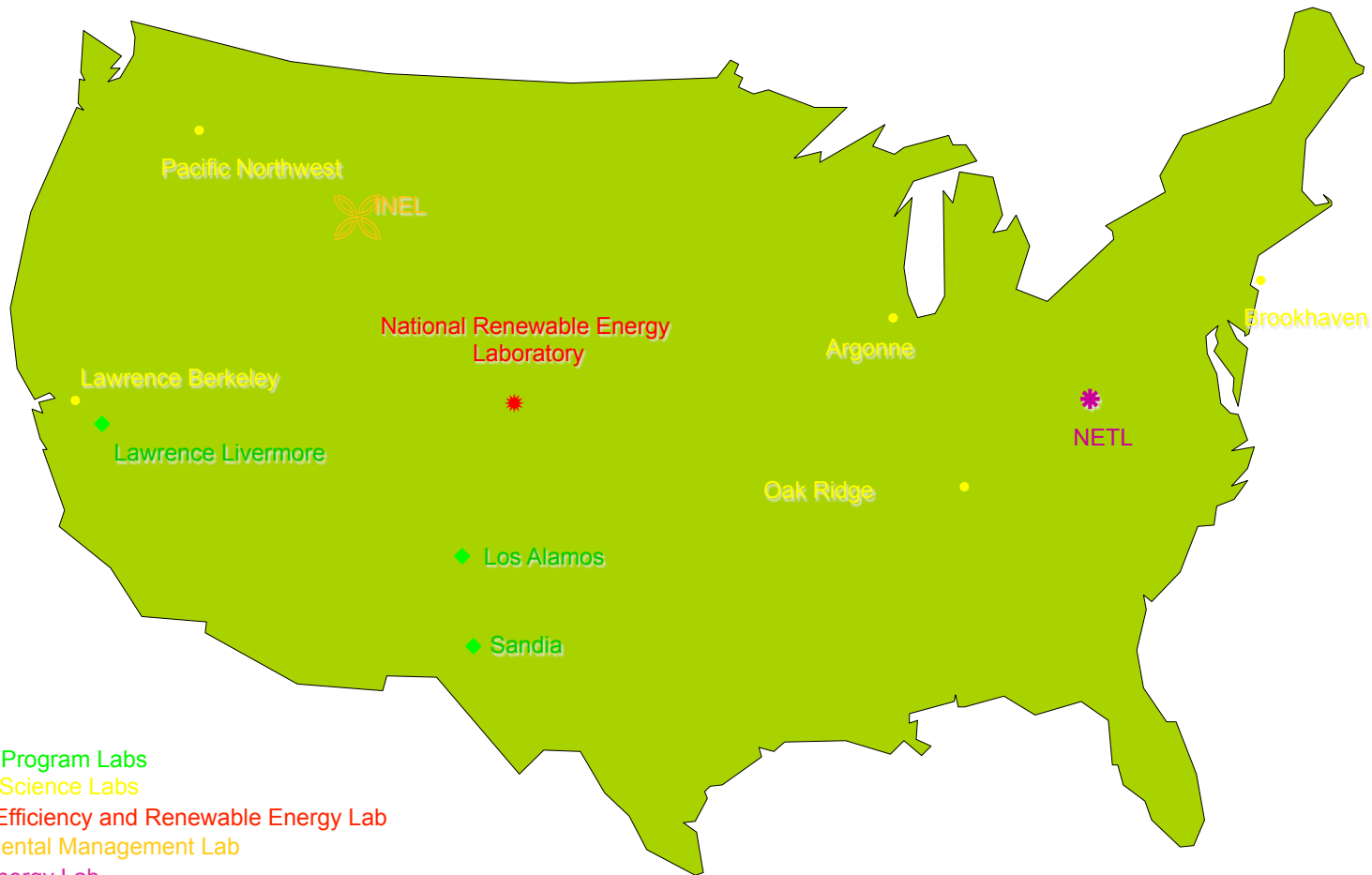


**AK Forum on the
Environment
Anchorage, AK
February 7, 2014**

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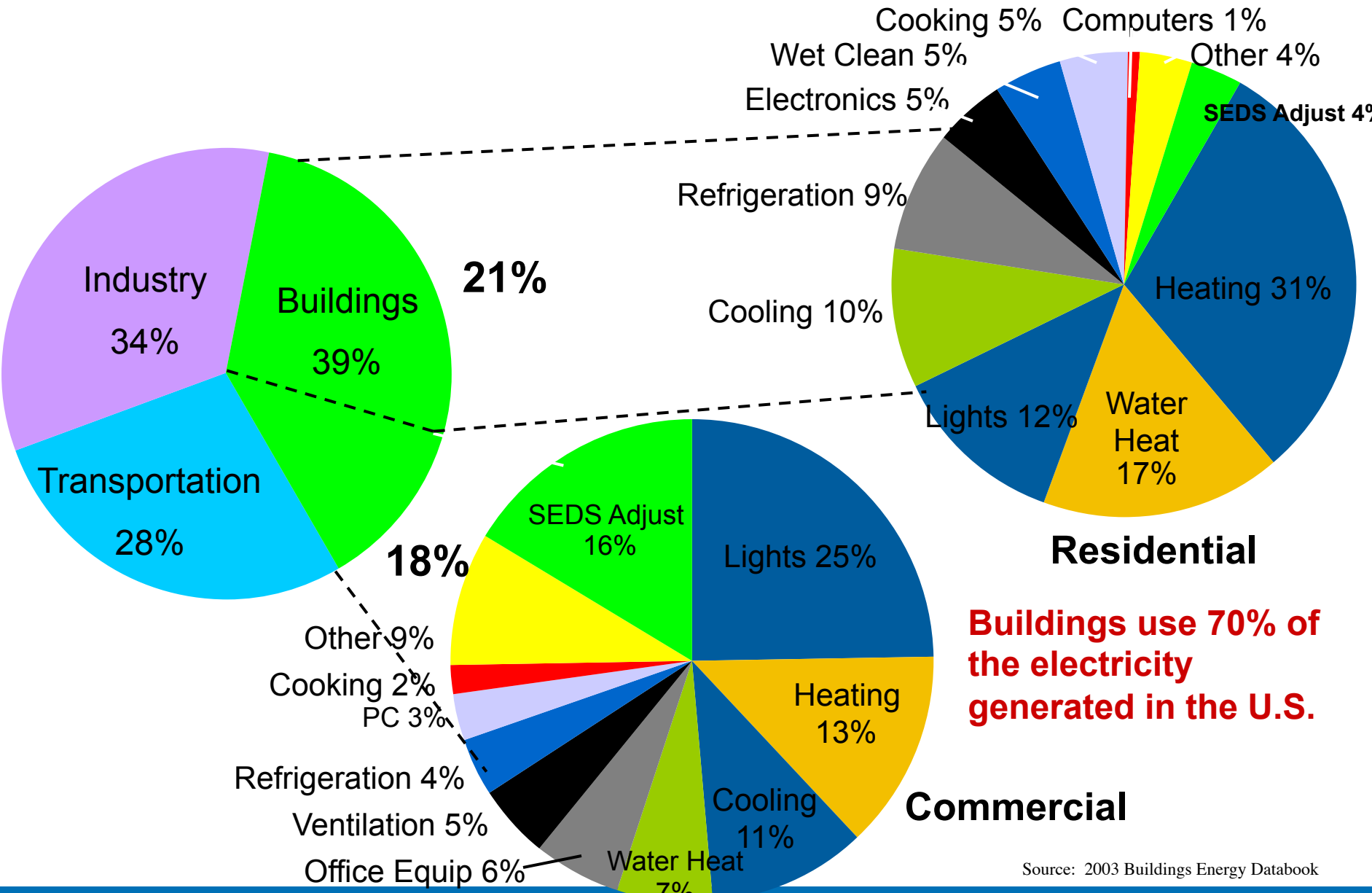
**National Renewable
Energy Laboratory
www.nrel.gov**

Major DOE National Laboratories



- ◆ Defense Program Labs
- Office of Science Labs
- ★ Energy Efficiency and Renewable Energy Lab
- ✿ Environmental Management Lab
- ✱ Fossil Energy Lab

Building Energy Use – Connection with Healthy Homes

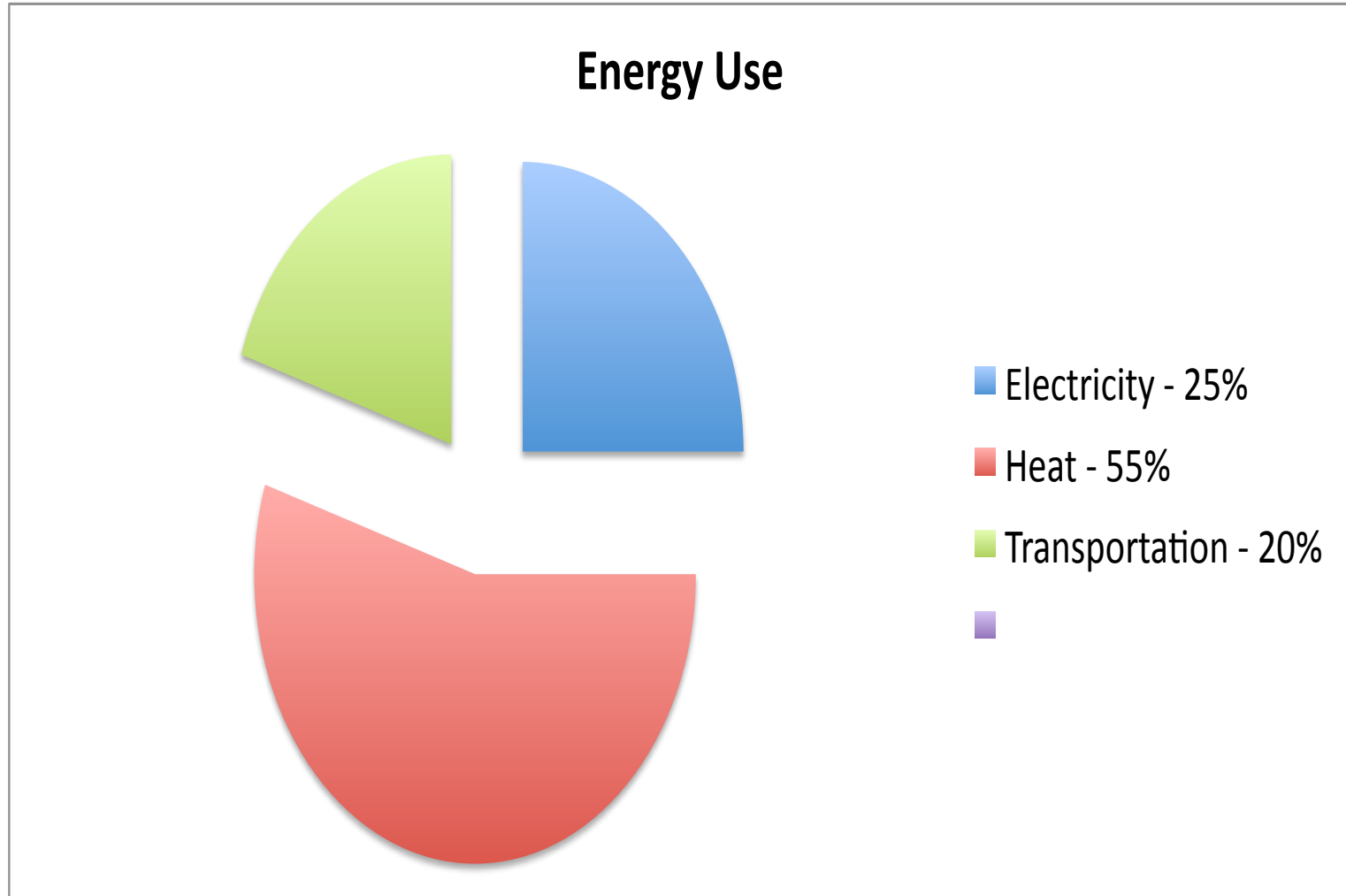


Source: 2003 Buildings Energy Databook

Improving Indoor (and Outdoor) Air Quality

Energy Efficiency is the
Cheapest, Fastest,
Cleanest, Easiest Place to
Start !

Typical AK Village Energy Consumption



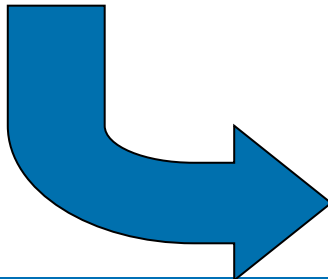
Got Wood? Clean it up!

Wood Stove Replacement

~ 80% efficient



~ 20% efficient



DOE OFFICE OF INDIAN ENERGY

Update on DOE Office of Indian Energy Policy and Programs



U.S. DEPARTMENT OF
ENERGY

Office of
Indian Energy

Near Term Initiatives

- START Program – Alaska and Lower 48
- Transmission and Electrification Technical Assistance Program
- Innovative Community Scale Development
- Energy Education and Capacity Building
- Indian Country Energy and Infrastructure Working Group
- Intra (DOE) and Interagency Coordination

Alaska START Program, Rounds I & II

Ten villages selected:

- Year 1: Kake, Arctic Village, Venetie, Teller Kwinhagak
- Year 2: Minto, Koyukuk, Yakutat, Shishmaref, Kongiganak

Key Goals/Objectives

- Identify and develop community capacity building
 - Energy planning
 - Community education
 - Energy champion(s)
 - Technical skills-building
- Lower cost/use of energy
 - Replace diesel with renewables
 - Micro-grid/storage
 - Energy efficiency/weatherization
- Identify funding/financing mechanisms for energy projects
- Identify and develop on-going sustainability and support mechanisms
 - Inter-tribal organizations
 - Non-profits
 - ANCs

Strategic Technical Assistance Response Team – AK START

ADVANCING EFFORTS
TO ENERGIZE
NATIVE ALASKA



- Partnership with DOE – Indian Energy & Tribal Energy; Denali Commission; AK; TA support by NREL, Sandia, & AK Native Corp
- 2nd year; 5 communities/yr
- TA + \$250K/community
- Collaborations with regional & Village Native corps, Inter-Tribal orgs, muni, non-profits, others



AK START 2012 Recipients



- Energy Fairs/community education
- Helped with PV, biomass, wind, and energy planning in Kake
- Community energy planning
- Major building weatherization/energy efficiency projects now underway

- Arctic Village & Venetie > 50% residential electricity rate reduction
- Large fuel x-fer & restore sewer & water in Teller health clinic
- Identified heat recovery project for Kwinhagak, resulting in \$660k grant, thousands of diesel gal saved

DOE Tribal Technical Assistance

40 hours of on-demand (non-competitive) Technical Assistance:

- Simple process (1 page form)
- Strategic Energy Planning
- Preliminary Resource Assessment
- Community Education
- Funding Options
- Trainings/Events
- Economic Analysis
- Project Development

http://apps1.eere.energy.gov/tribalenergy/request_assistance.cfm

State programs

Residential

- Weatherization (AHFC)
- Home Energy Rebate (AHFC)
- 5 Star+ New Home Rebate (AHFC)
- 6 Star New Home Rebate (AHFC)

Commercial/Public

- Village Energy Efficiency Program (AEA)
- Commercial Building Energy Audit (AEA)
- Energy Efficiency Revolving Loan Fund (AHFC)
- Waste Heat/Combined Heat and Power (AEA)
- Renewable Energy Fund (AEA)

Other Resources

- Education and Outreach (AEA)
- Consumer Education – How-to classes (AHFC)
- Planning and Technical Assistance (AEA)
- Professional/Leadership Classes (AHFC)



For More Information

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