Colorado New Energy Summit

March 24, 2007

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NREL/PR-100-41479
Presented at the Colorado New Energy Summit held March 24, 2007 held in Denver, Colorado.

National Renewable Energy Laboratory

What Makes Us Unique?

- Only national laboratory dedicated to renewable energy and energy efficiency R&D
- Research spans fundamental science to technology solutions
- Collaboration with industry and university partners is a hallmark
- Research is market relevant

Energy Efficiency and Renewable Energy Technology Development Programs

NREL R&D Portfolio

Efficient Energy Use

- Vehicle Technologies
- Building Technologies
- Industrial Technologies

Renewable Resources

- Wind
- Solar
- Biomass
- Geothermal

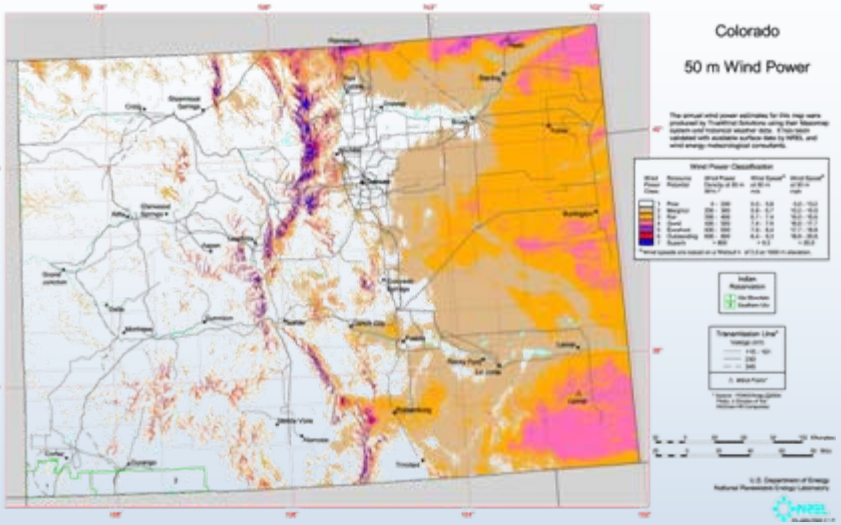
Energy Delivery and Storage

- Electricity Transmission and Distribution
- Alternative Fuels
- Hydrogen Delivery and Storage

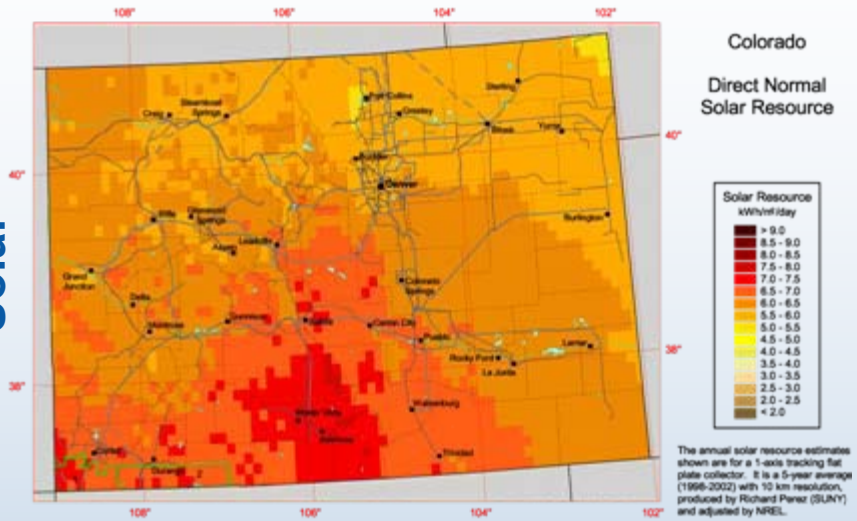
Foundational Science

Colorado Resources

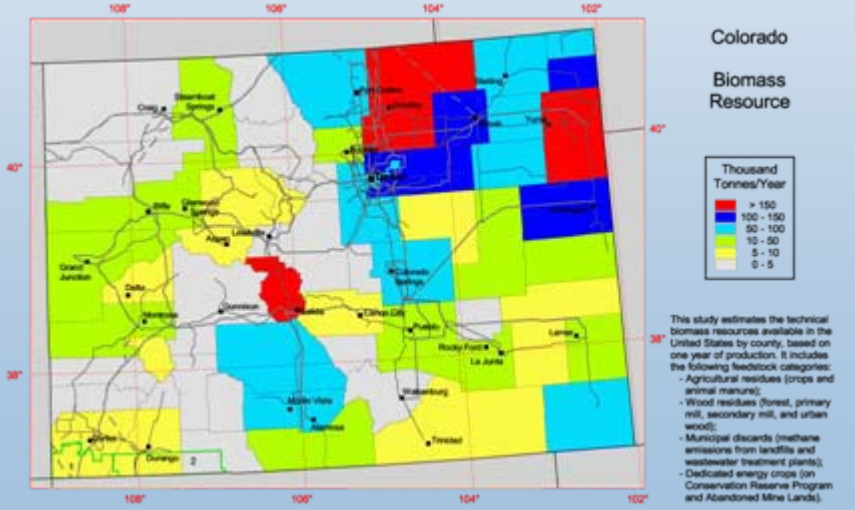
Wind



Solar



Biomass



Geothermal

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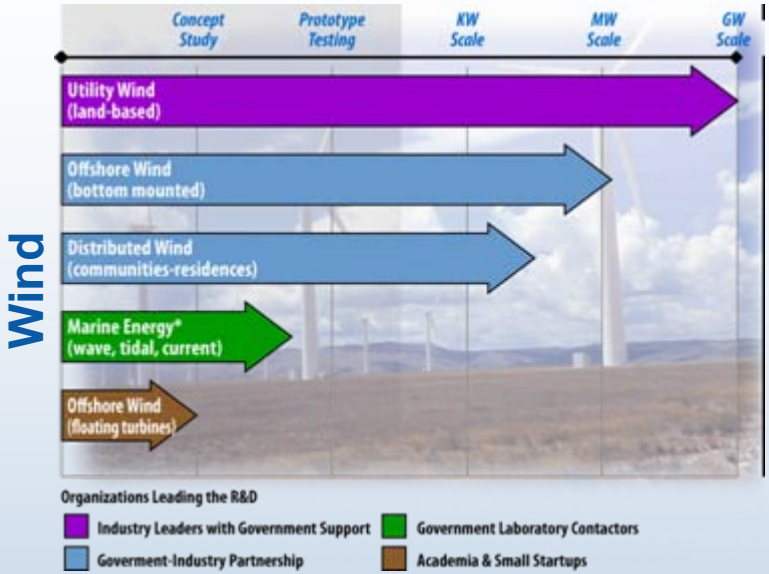
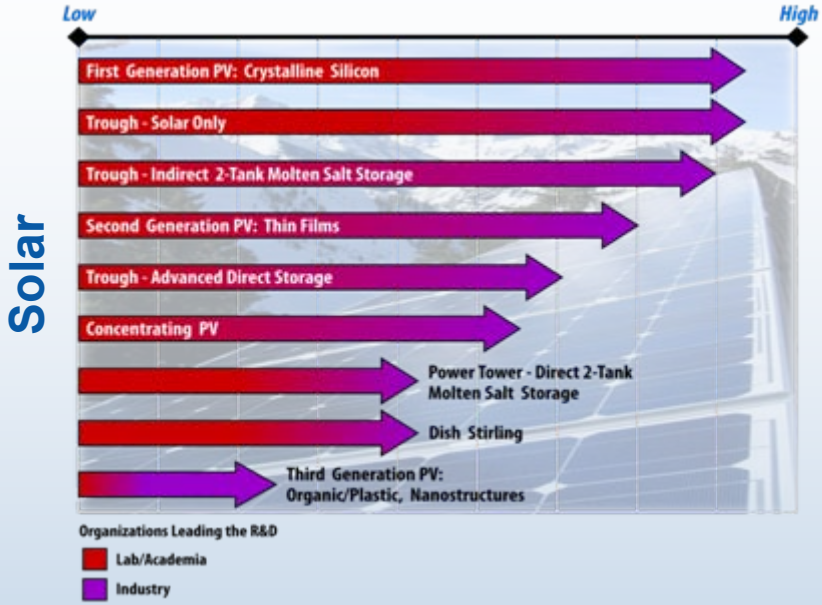
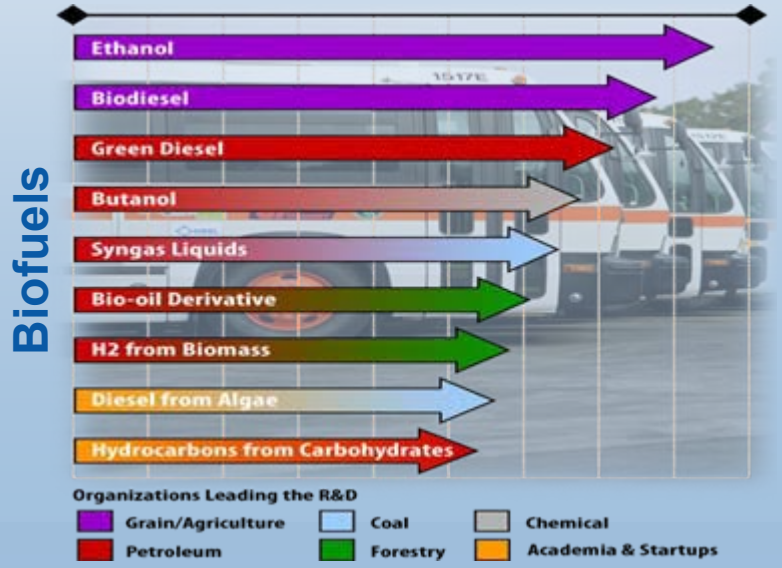
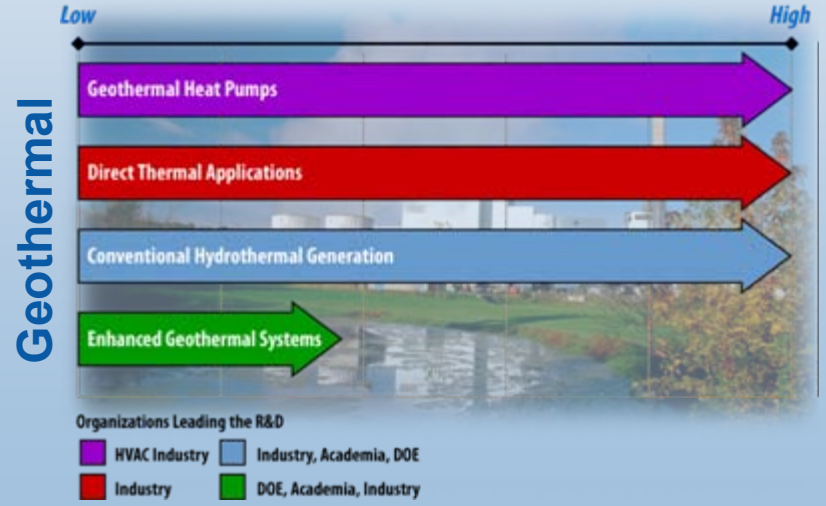
Technology Maturity Pathways









Workforce of the Future

NREL Development Programs

Internships

- 100 in 2006
- Direct access to equipment and facilities
- Mentorship by NREL staff
- Ambassadors for renewable energy
- Professional opportunities

Professional Development

- Hands-on and technical information for success
- 10 new DOE “Academies Creating Teacher Scientists” positions awarded for 2007
- NREL’s new Energy Executive Leadership “Energy Execs”

Renewable Energy: Enabling Economic Growth in Colorado

- Plentiful resources
- Centers of excellence
- Regulatory and business environment

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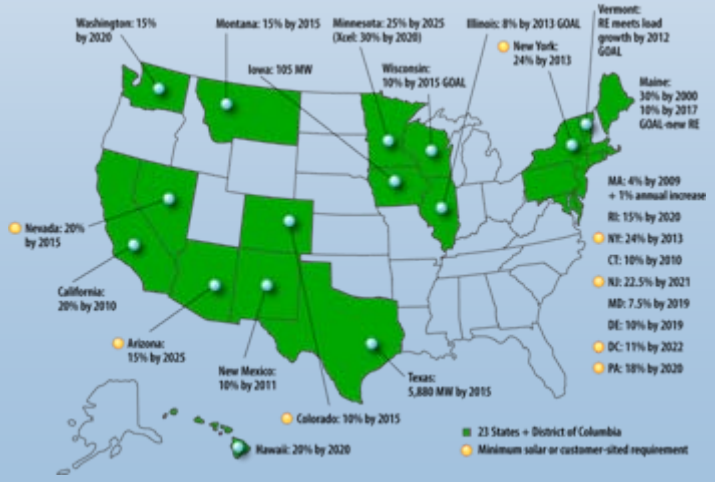
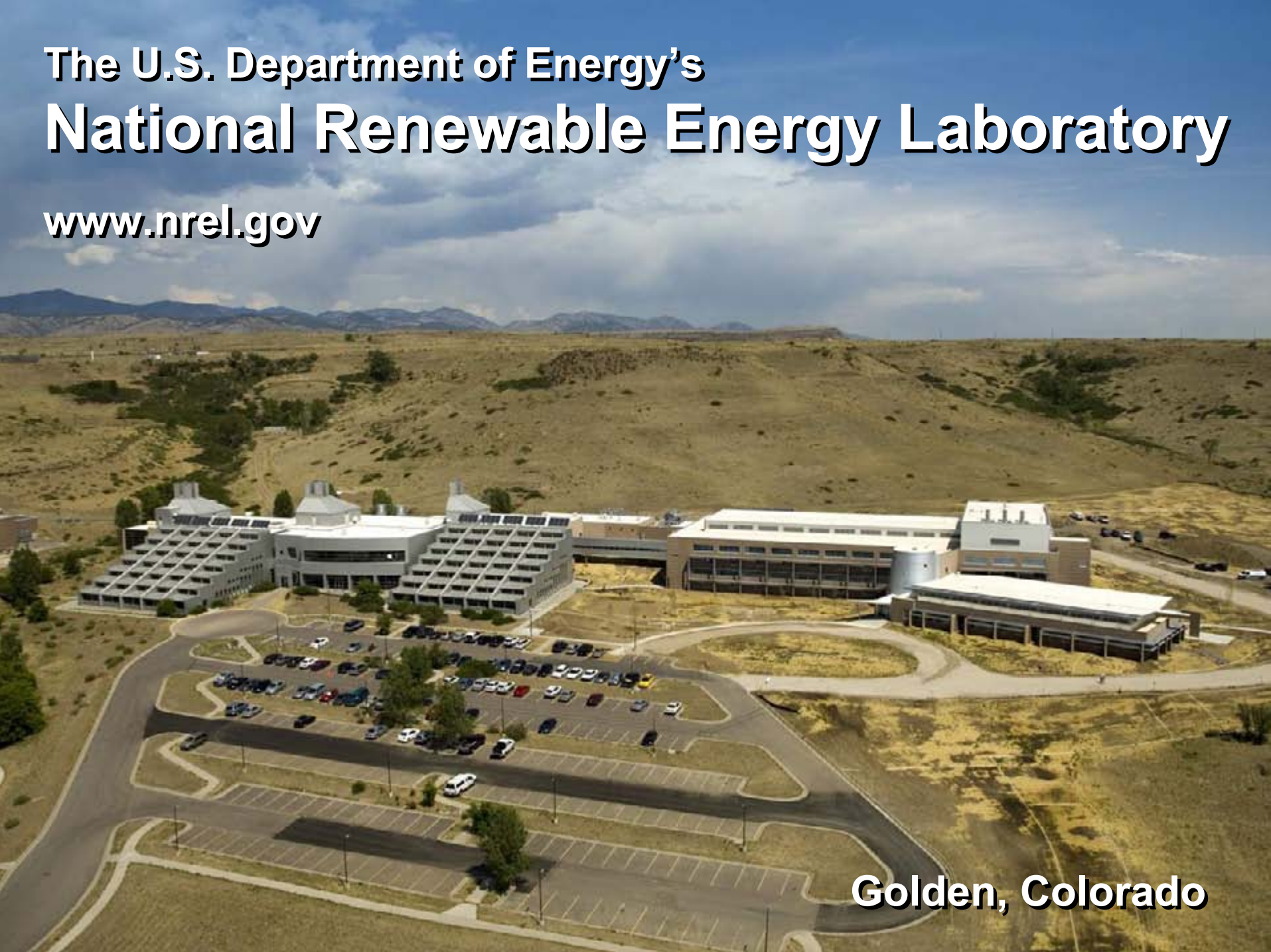
Conclusion

- Unique opportunity – national sense of urgency about energy
- Integration of energy efficiency and renewable energy will largely be local, distributed
- Progressive states will capitalize on renewable energy's benefits earlier than others




The U.S. Department of Energy's
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