

# Colorado New Energy Summit

March 24, 2007

Dan E. Arvizu

Director, National Renewable Energy Laboratory

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



## Efficient Energy Use

- Vehicle Technologies
- Building Technologies
- Industrial Technologies



## Renewable Resources

- Wind
- Solar
- Biomass
- Geothermal



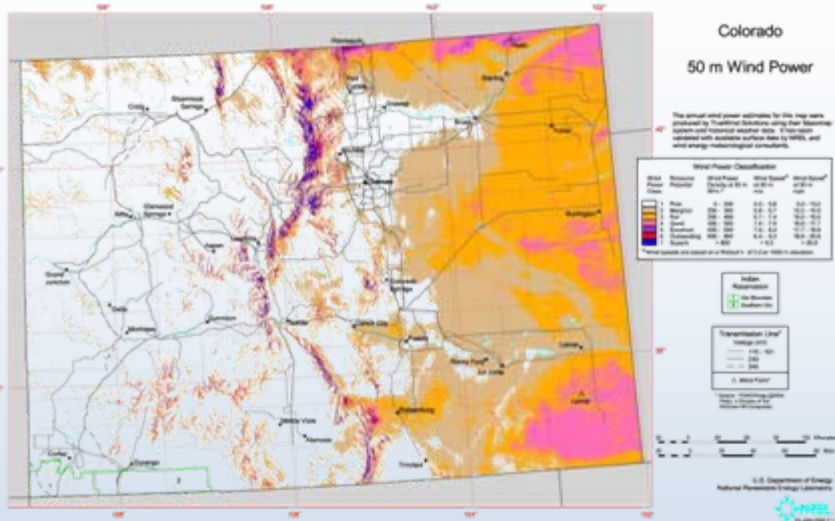
## Energy Delivery and Storage

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

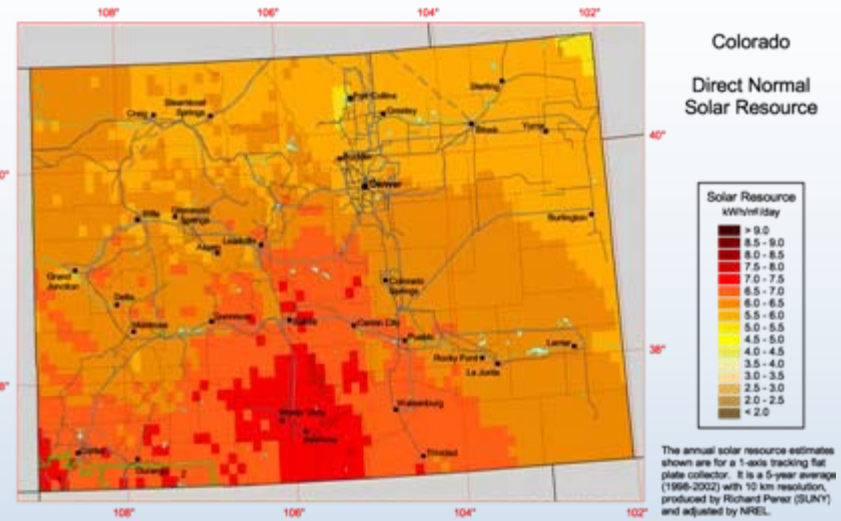


# Colorado Resources

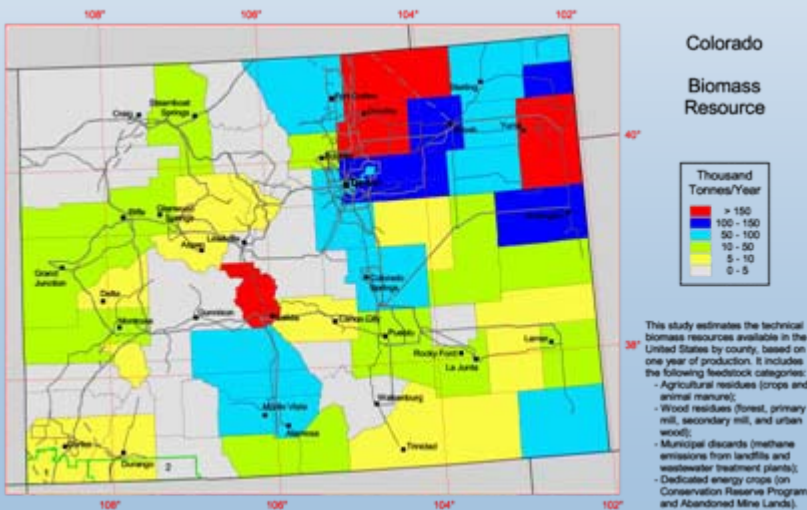
Wind



Solar



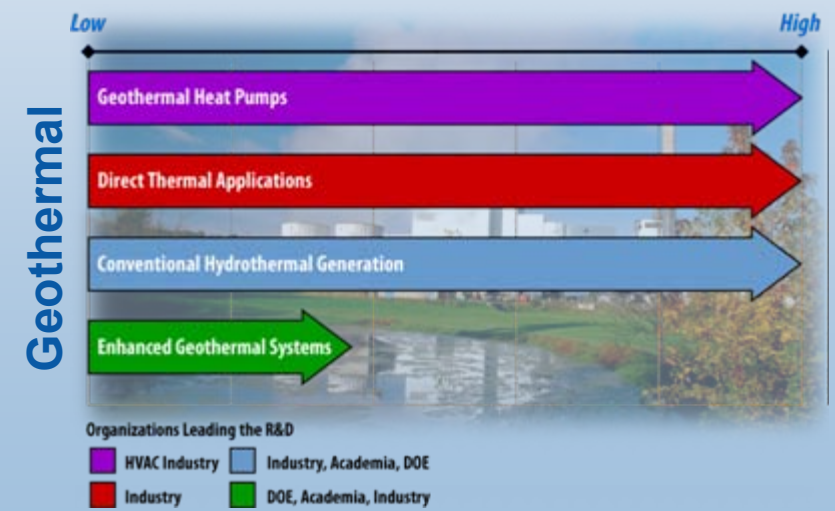
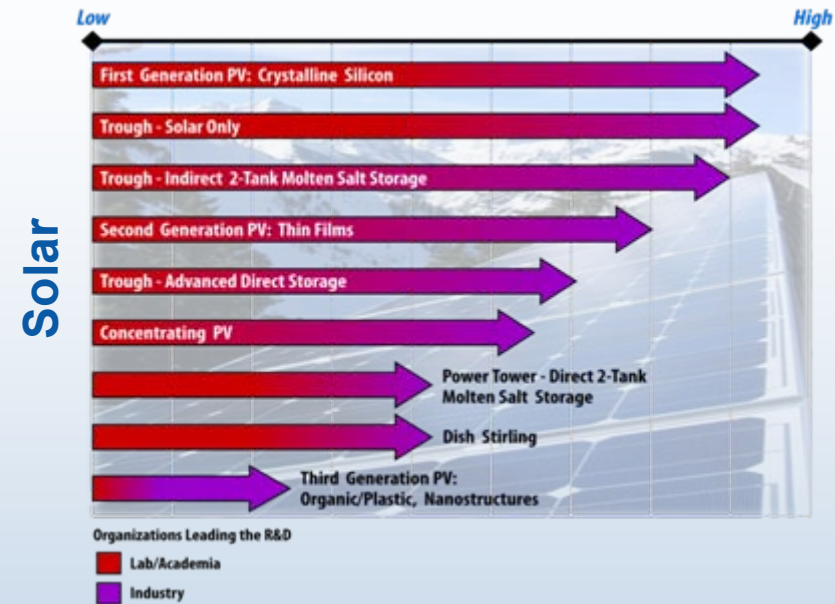
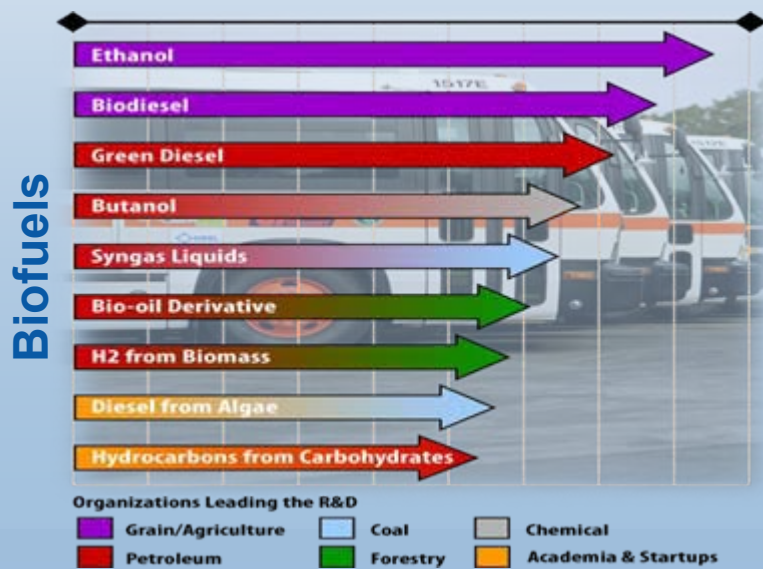
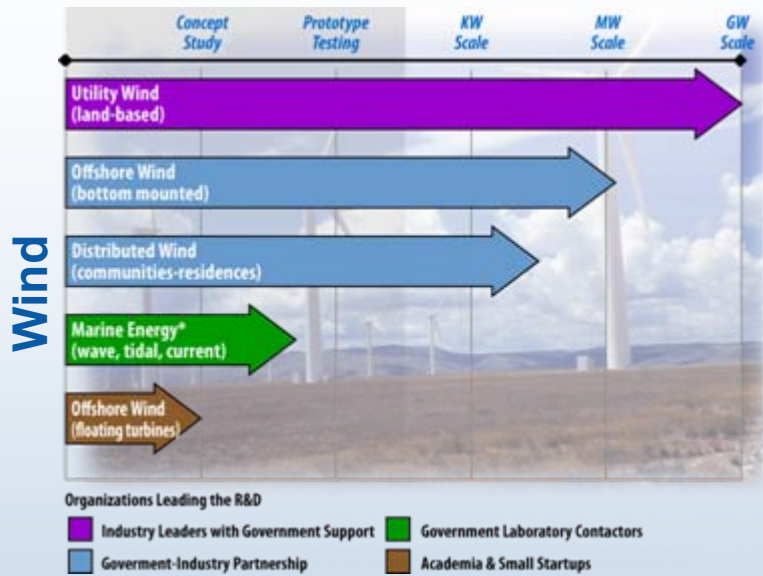
Biomass



Geothermal



# 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

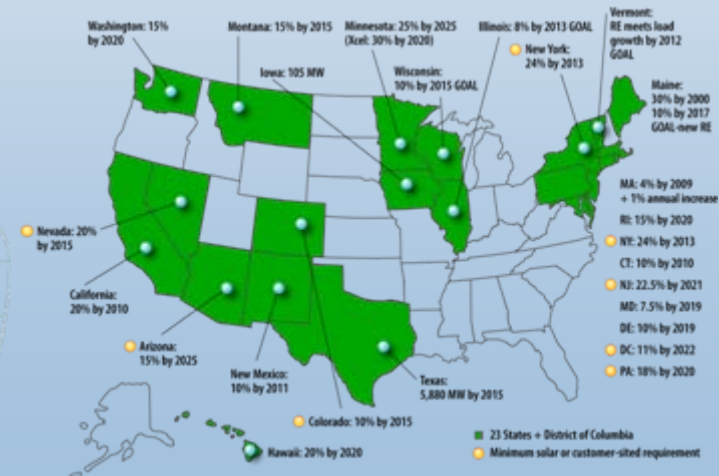
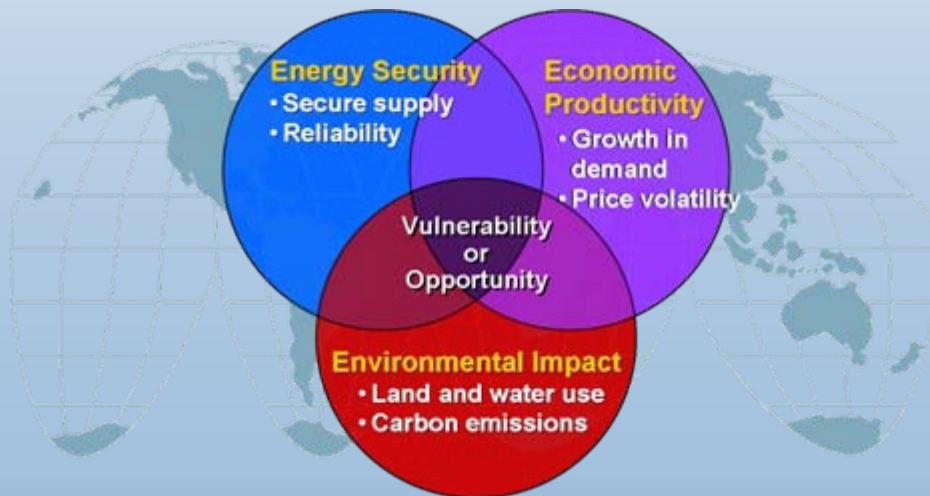
- Plentiful resources
- Centers of excellence
- Regulatory and business environment



NCAR

# 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 National Renewable Energy Laboratory

[www.nrel.gov](http://www.nrel.gov)



**Golden, Colorado**