

# Combined Heat and Power Southeast Regional Application Center

Identifying Opportunities for Combined Heat and Power Webinar  
July 21, 2009

Keith McAllister, PE  
North Carolina Solar Center

North Carolina State University  
Mississippi State University  
[www.CHPCenterSE.org](http://www.CHPCenterSE.org)

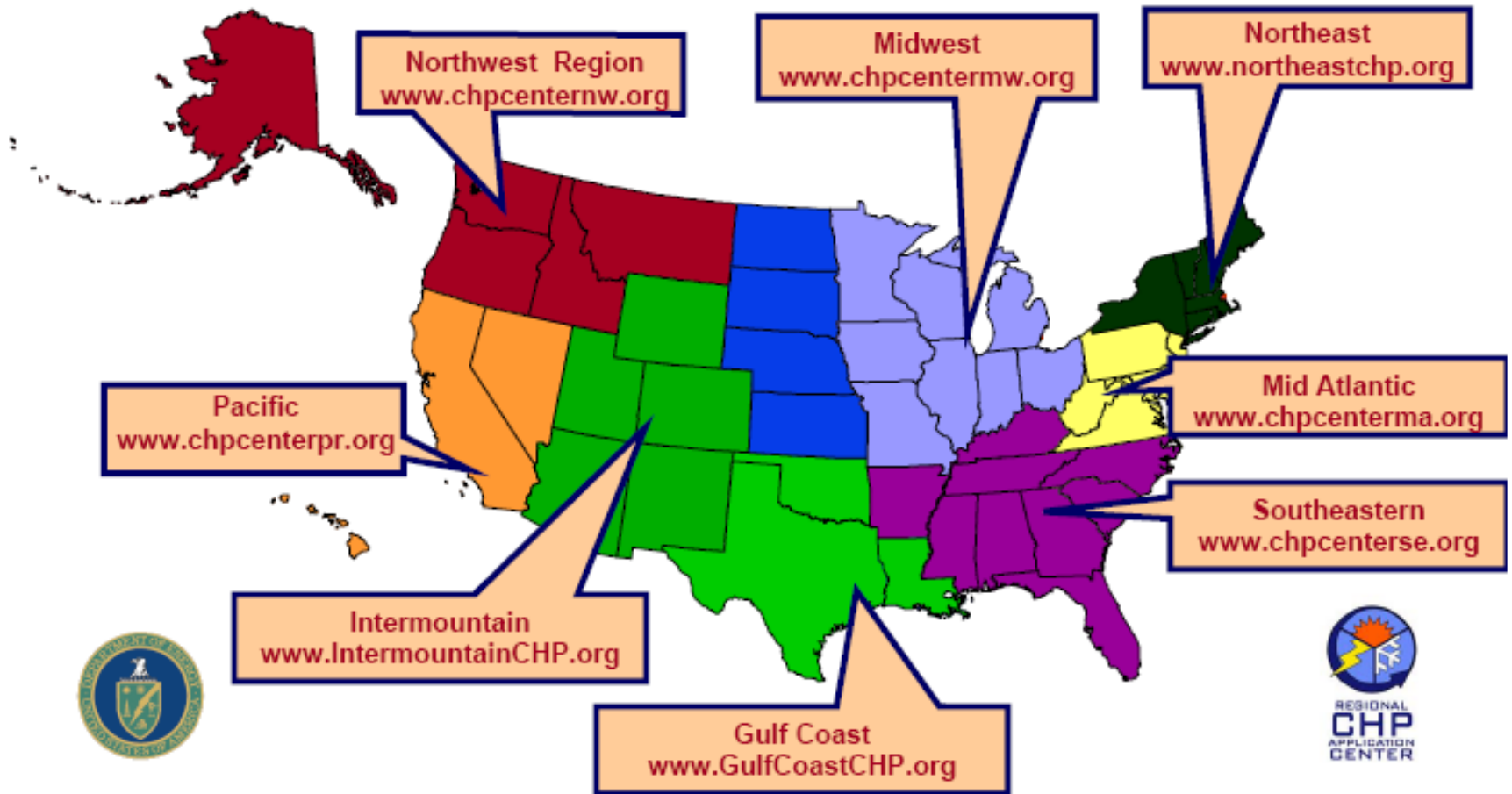


# National CHP Roadmap

- DOE/EPA/USCHPA Team Effort Formally initiated with the announcement on Dec., 1998 of the CHP Challenge to double the amount capacity in the US by 2010.
- Visioning workshop held June, 1999.
- 1st National Roadmap Workshop held in Baltimore in Nov, 2000. 1st “Roadmap” w/action plan published March, 2000.
- 2nd National CHP Roadmap workshop held in Baltimore in Oct., 2001.



# Regional Application Centers



# Barriers facing CHP

- Financial Challenges
  - High first cost
  - Uncertainty of financial incentives
  - Uncertainty of RE credits for biomass
  - Low spark spread
- Unreasonable/uncertain interconnection requirements
- High standby/back stand charges
- EE environmental benefits not valued
- Siting / permit delays
- Non-core business investment



# Roadmap - Priorities

- Policy development
- Education & Outreach
- Market Analysis
- Technology RD&D
- Demonstration Projects
- Vendor/equipment support
- Project development support
- Tool development



# RAC activities

- Education & outreach
  - Website ([www.chpcenterse.org](http://www.chpcenterse.org))
  - Focused training & support
  - Workshops & conferences
  - Regulatory interactions
  - Project profiles / Case studies
- Project support
  - Site assessments (Level I & Level II)
  - Technical assistance



# RAC activities

- Policy development
  - EPA CHP partnership
  - USCHPA support
  - CHP Team support
  - State focused support
  - White papers
  - Technical support to legislators / regulators / NGO's



# RAC activities

- Tool development
  - CHP Primer
  - CHP graduate level courses
  - CHP screening guide
  - Environmental permitting guidebook
  - CHP resources guidebook
  - Target market collateral
  - Heat Map software



# RAC activities

- Demonstration
  - Micro-CHP facility @ MSU
  - RE-CHP demonstration facility @ NCSU
- Vendor support
- Market Assessments
- Technology RD&D



# Clean Energy Application Centers

- Transform CHP RACs
- Authorized in EISA 2007
- Recent FOA and announcement of award winners
- Focus on CHP, District Energy, Waste Heat Recovery and other Clean Energy Applications



# Clean Energy Application Centers

CEAC's will integrate Industrial Technology Program products into their offerings

- Industrial Assessment Centers
- Save Energy Now - Energy Savings Assessments
- Qualified Specialist training programs
- Distance learning opportunities



# CHP Center SE

Questions?



# CHP Center SE

- Dr. Louay Chamra – MSU  
[chamra@me.msstate.edu](mailto:chamra@me.msstate.edu)  
662-325-0618
- Keith McAllister, PE  
[keith\\_mcallister@ncsu.edu](mailto:keith_mcallister@ncsu.edu)  
919-515-3933

