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Project Development Leader

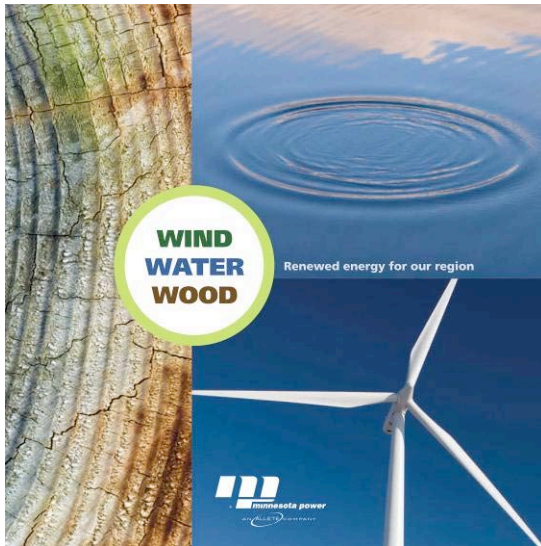
January 9, 2009

Minnesota Power Overview

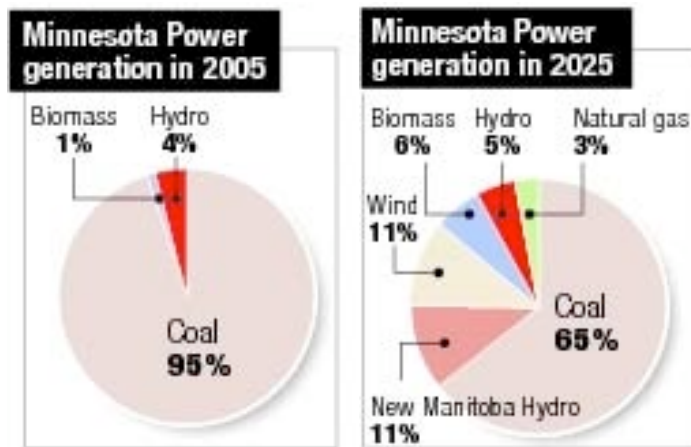
- Regulated, Investor Owned Utility serving Northeastern Minnesota
- Division of Allete
 - NYSE: ALE
- Customer Base:
 - 141,000 Retail Customers
 - 16 Municipal Customers
 - 12 Large Industrial Customers account for approximately 50% of our kilowatt hour sales
 - Natural Resource Economy
 - Timber, Mining, Pipelines



Minnesota Power Renewable Strategy



- Diversified portfolio
- Reduce carbon emissions
- Find the right type of generation, at the right time, to provide our ratepayers with the lowest cost alternative





What is the Goal of Minnesota Renewable Energy Policy?

- To increase renewable energy generation?
- To move technology forward?
- To maximize the quantity or achieve a balance of renewable generation?

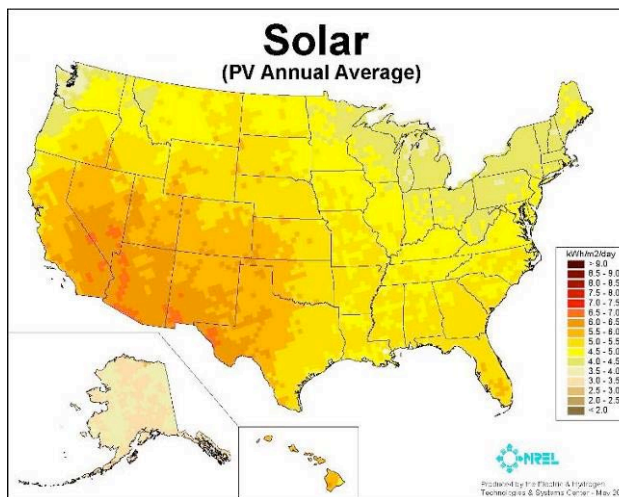
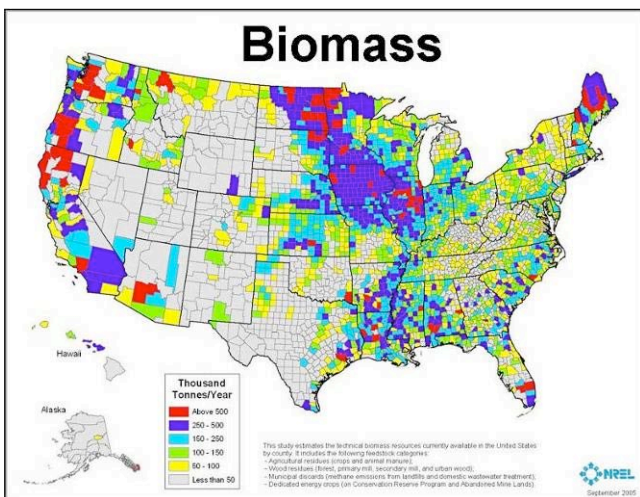
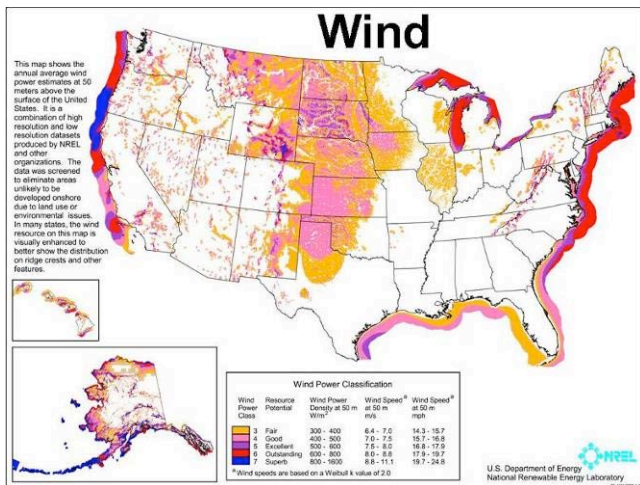


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Assessing Renewable Resource Availability

- The Midwest is fortunate that our location allows access to premium wind and biomass resources, but unfortunate to have only a moderate solar resource





Increasing Renewable Generation?

- The Minnesota Renewable Energy Standard (RES) requires Minnesota Power to produce 25% of our annual energy from renewable resources by 2025
- Minnesota Power started at 5% renewable in 2005 and reached 11% in 2008
- Minnesota Power has plans to continue our successful renewable expansion using primarily the premium Wind and Biomass resources in our region along with other renewables as they become cost competitive to achieve 25% by 2025 at the lowest cost to our ratepayers
- **Conclusion:**
The existing RES policy is succeeding in expanding renewable energy generation in Minnesota

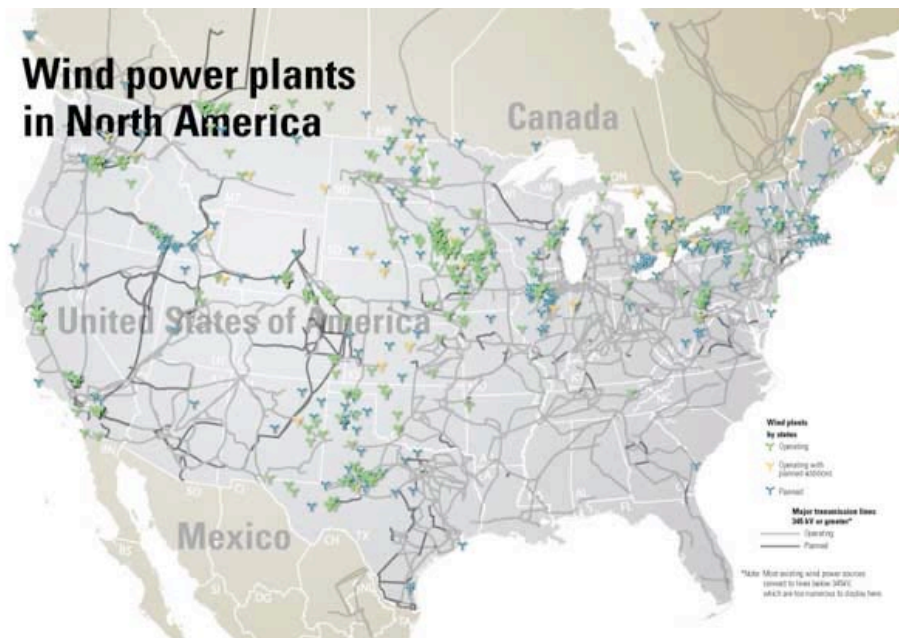


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U.S. Wind and Solar Development

- Wind focused in the Midwest
 - In 2008, U.S. became the World Wind Leader!
- Solar focused in the Southwest and some to the East
 - Utilities announced over 1600 MW of PV projects in 2008!



Source: Power Magazine

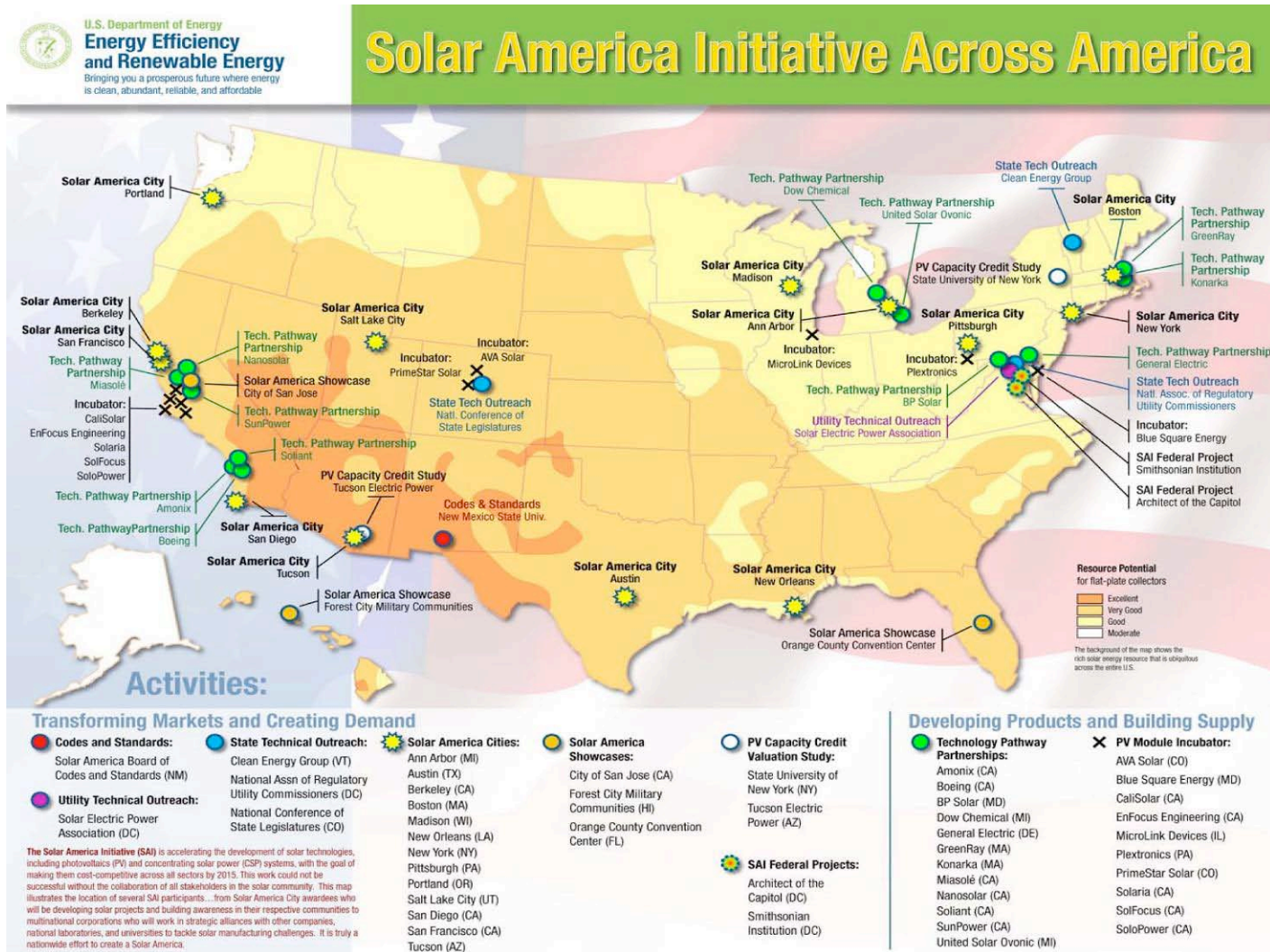
Announced Solar Plants (>1 MW)



Source: Earth2Tech



U.S. Solar Research & Development





Technology Advancement?

- Regions of the U.S. with premium renewable resources have driven the manufacturing scale up for the respective technologies
- Investments are being made in research and development to find the step changing improvements in efficiency required to bring higher cost technologies, e.g. Solar, closer to grid parity
- **Conclusion:**
New policy in Minnesota will not have a significant impact on the technology advancement of high cost renewable generation



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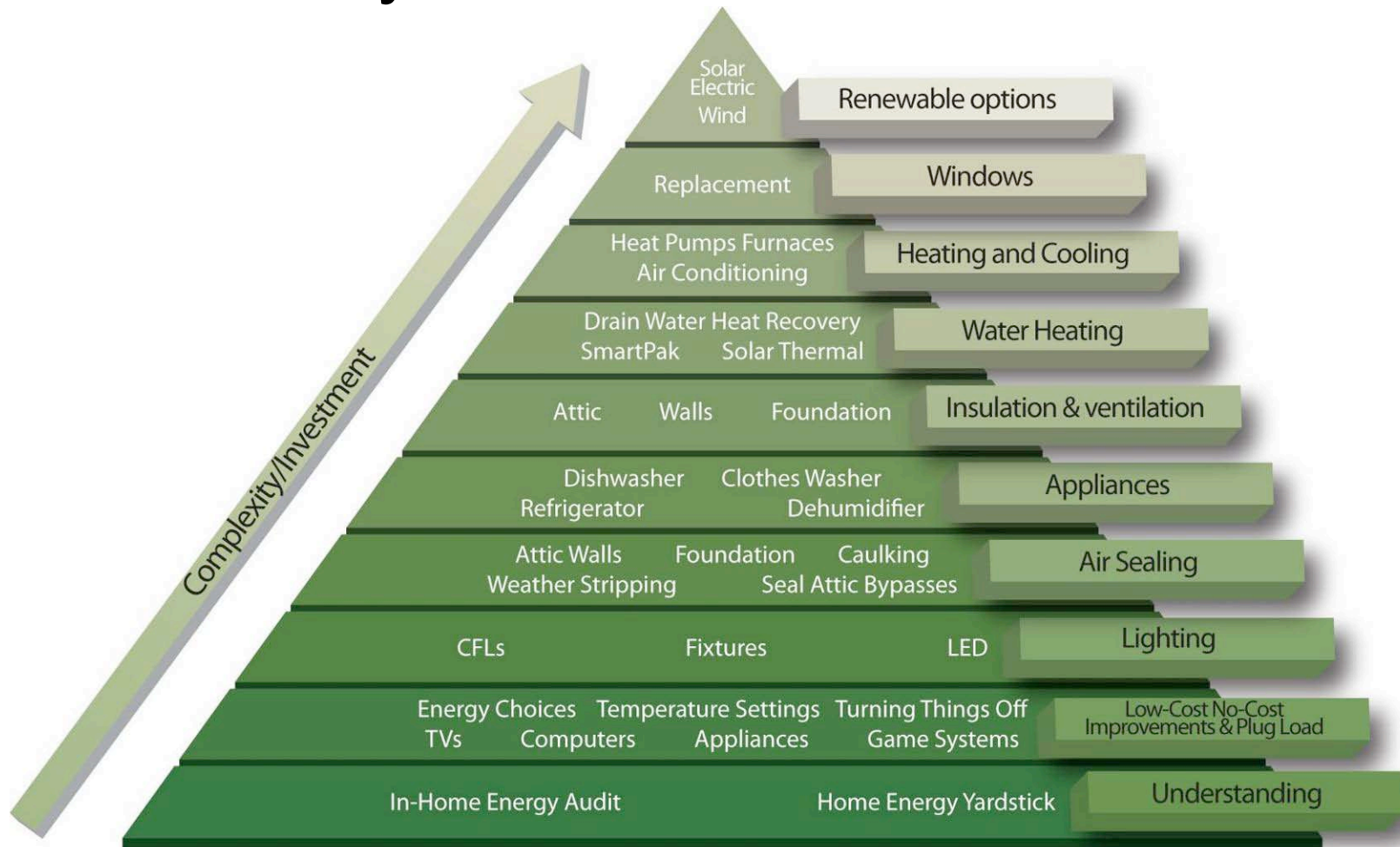
Build Out Costs of Solar vs. Wind in MN

| % of MN Energy | Annual Energy (MWh) | Solar | | | Wind | | | Wind vs. Solar |
|----------------|---------------------|-------|--------------|---------------|------|--------------|---------------|---------------------|
| | | MW | Capital | | MW | Capital | | Delta \$ Per Person |
| | | | Total (\$MM) | \$ per Person | | Total (\$MM) | \$ per Person | |
| 0.1% | 67,000 | 51 | \$178 | \$36 | 22 | \$49 | \$10 | \$26 |
| 1% | 670,000 | 510 | \$1,785 | \$357 | 219 | \$492 | \$98 | \$259 |
| 10% | 6,700,000 | 5,099 | \$17,846 | \$3,569 | 2185 | \$4,917 | \$983 | \$2,586 |

■ Assumptions

- 2005 Total Electric Consumption for Minnesota of 66,567 Gigawatt-Hours from “The Minnesota Utility Data Book” published by the Department of Commerce
- Solar capacity factor of 15% for fixed tilt PV systems and \$3,500 per kW installed capital cost (Utility Scale Cost: \$5,000/kW – 30% Federal Investment Tax Credit)
- Wind energy at 35% net capacity factor and \$2,250 per kW installed capital cost
- Minnesota population estimated at 5,000,000

Cost Efficiency: The Pyramid of Conservation





Maximizing Quantity or Balance?

- There is a significant cost adder to build out less efficient renewable generation in Minnesota
- There is a broad range of cost effective solutions that are important for our customers to consider before investing in renewable energy generation
- **Conclusion:**
Maximizing the quantity of renewable generation at the lowest cost leaves financial resources available for other valuable uses

In Summary...

- Existing policies are successful in increasing renewable energy generation in Minnesota
- Technology development for Minnesota's next generation of renewables, e.g. solar, is and will continue to happen in other regions regardless of what new policies Minnesota adopts
- Policies that emphasize the use of the lowest cost renewable generation alternatives free up resources to improve our ability to meet all of Minnesota's energy goals
- Minnesota Power's goal is to minimize cost while we meet the RES so that we minimize the increase in energy costs of our customers to assure the long-term competitiveness of our economy in the global marketplace