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WIND
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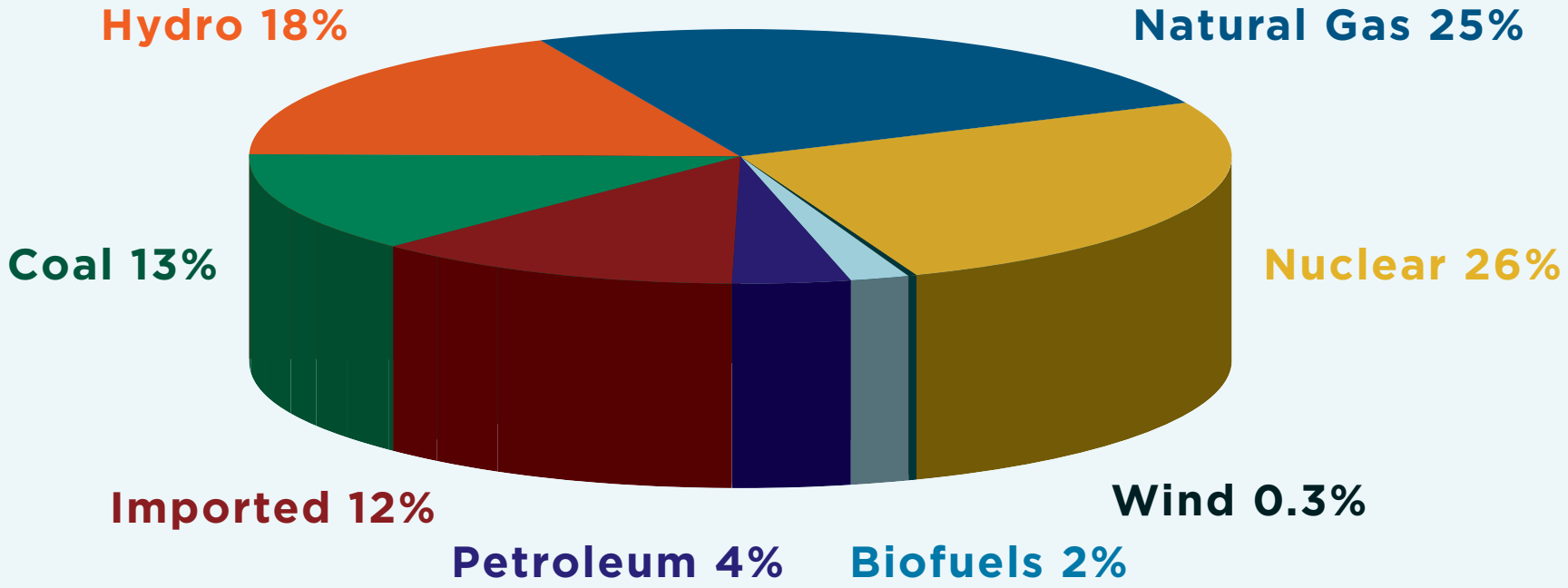
The challenge:
Energy Use in New York State

- New York State used 1.7 million mWh of electricity in 2006.
- The average household in the state consumes 591 kWh.



Wind Power: A Possible Solution?

- Humans have harvested the power of the wind for centuries.
- The "modern" era of large-scale wind farms producing utility-grade power began in the United States in the late 1970s.
- The United States was the leading developer of wind-power solutions until the early 1990s. Europe leads the world today both in deployment and turbine manufacture.
- Nationally, wind power produces 16,904 MW a year. Over 1/3 of the new generating capacity brought online nationally in 2007 was wind power.

Onshore and Offshore Wind

- Modern commercial wind turbines measure between 210 and 265 feet in height and generate an average of 1.65 MW of electricity each.
- The average electricity produced by wind farms (large collections of individual turbines) installed in 2007 was 120 MW.
- Offshore wind is a promising new arena for wind development as offshore areas are generally far windier than adjacent coastal areas. There are currently 25 offshore wind farms in Europe and none in the U.S.

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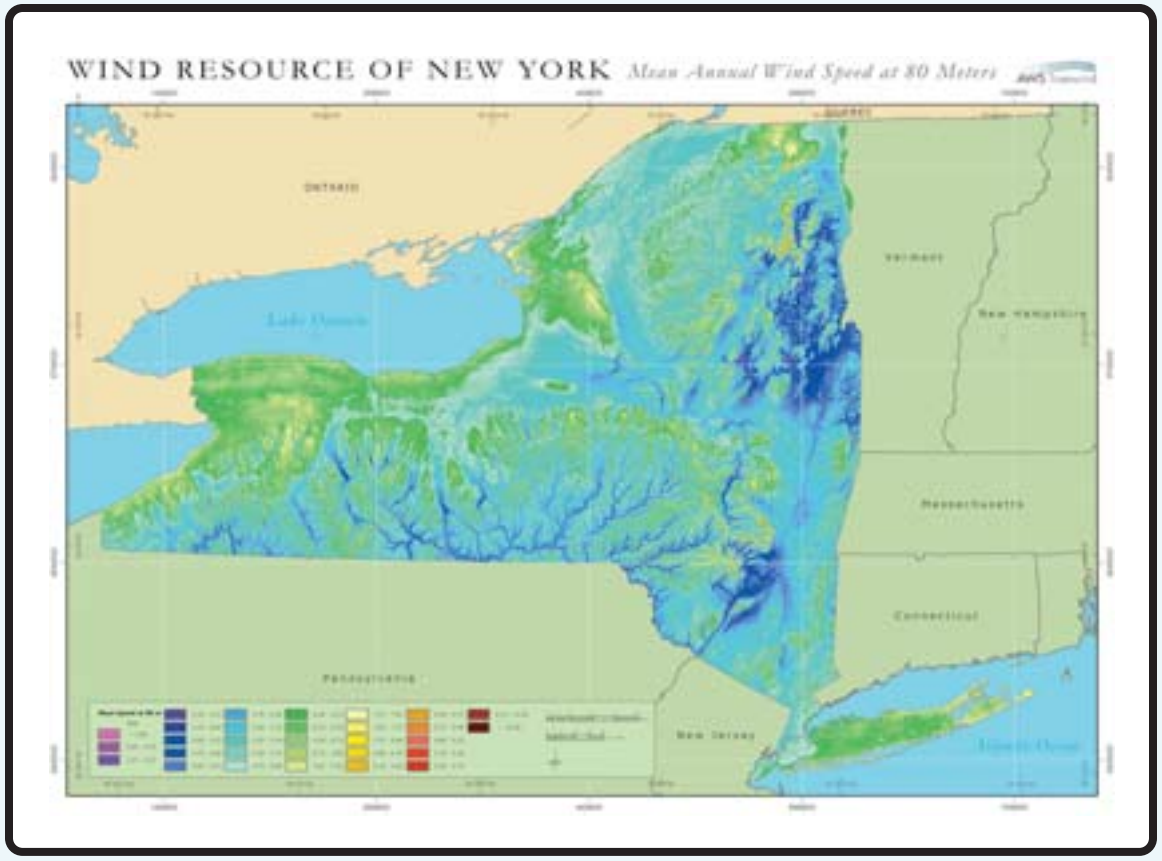
Wind in New York State

- According to the ISO, 12 wind farms were generating 707 MW of wind power in New York State as of August 2008



- 6 more wind farms (589 MW of capacity) are under construction, which should bring the state's total wind generation capacity to 1,300 MW by summer 2009.

- Developers have proposed more projects with a total capacity of 6,500 MW that are currently in various stages of regulatory review.

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Concerns about Wind: Transmission & Siting

- The windiest areas of the country are remote and are not located near load centers. New transmission capacity will need to be added to harness these resources.
- Investments in new transmission infrastructure nationally have been stagnant.
- There also are concerns about the impact of wind farms on scenic and historic view sheds, as well as the potential impact of these structures on birds and bats.

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The Role of Government: Federal Incentives

- The federal government's Production Tax Credit (PTC) is a major incentive for wind farms.
- Created in 1992, the PTC provides a tax incentive to utility-scale wind turbines. This important tax credit was allowed to lapse in 1999, 2001 and 2003, seriously hampering the development of wind power in those years.
- The PTC was set to expire this December but was extended for one year by the recently adopted financial rescue package.

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State Incentives and Regulation

New York State offers a handful of incentives to wind developers, in addition to federal subsidies. These include:

- ✓ Net Metering
- ✓ On-Site Small Wind Incentives
- ✓ The Renewable Portfolio Standard (RPS)
  - – The RPS requires all utilities in the state to purchase 20% of their electricity from renewable sources by 2013. Changes in this law could have major impacts for wind developers throughout the state.
  - – New York State's power plant sitting law, Article X, expired in 2002 and has not been renewed, leading to tremendous regulatory uncertainty.

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The Role of Government: New York State Challenges

- How have the state's existing regulatory and incentive policies affected wind development?
- What can we be doing to improve the state's transmission infrastructure?

Conclusions:
Where do we go from here?

- What role should wind play in New York's energy future?
- What role will government play in encouraging the development of wind power?

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