

Energy Summit 08

Energy Independence: Myth or Reality?



MYTH OR REALITY?

Big Foot



Loch Ness Monster



Energy Independence



Scruples on Wall Street



New York State Energy Research and Development Authority (NYSERDA)

- **Established in 1975 by State Legislature**
- **Mission: To use innovation and technology to help the State solve some of its most challenging energy and environmental problems in ways that promote economic development**
- **Forge public/private partnerships: across all sectors & stakeholders**
- **Provide financial and technical assistance through a wide range of competitive solicitations**



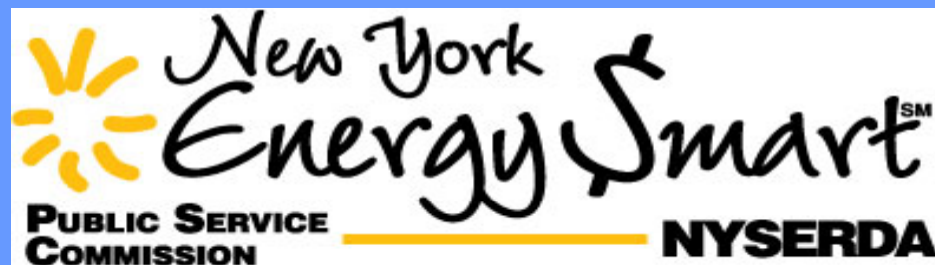
NYSERDA Responsibilities

- **Deploy energy-efficient technologies (SBC & EEPS)**
- **Energy planning and analysis, coordinate State's activities with other State agencies**
- **Renewable Portfolio Standard (RPS)**
- **Research & Development**
- **Saratoga Technology + Energy Park – STEP**
- **Annual program funding of \$400+ million**



New York State Initiatives

- System Benefits Charge (SBC)
- Renewable Portfolio Standard (RPS)
- Governor Paterson's 15 by 15
- Energy Efficiency Portfolio Standard (EEPS)
- Renewable Energy Task Force
- Regional Greenhouse Gas Initiative (RGGI)



System Benefits Charge Public Policy Goals

- Improve system-wide reliability and increase peak electricity reductions
- Improve energy efficiency and access to energy options
- Reduce the environmental impacts of energy production and use
- Facilitate competition in the electricity markets



Major Program Accomplishments

- Annual energy bill savings of \$590 million, includes electricity, natural gas, and oil
- Reduced air pollution by 2,640 tons of NO_x, 4,810 tons of SO_x, 2,050,000 tons of CO₂
- CO₂ reduction equivalent to removing 410,000 automobiles from New York roads
- 4,700 jobs created/retained in New York State Reduced annual statewide electric energy requirements by 3,100 GWh
- Peak-Demand Reductions of 1,220 MW permanent/callable
- Enhanced electric system reliability with 106 GWh of renewable resources
- Over \$250 million in product sales



Energy Efficiency Assistance Provided to Market Place

Upstream

Industry
Processing
Trade Associations

Manufacturing

RD&D
Proof of concept
Product development
Demonstration
Testing
Manufacturing

Midstream

Wholesalers
Energy companies
Equipment suppliers
Trade professionals

**Distributors
& Vendors**

Information
Training
Financial incentives
(sales and stocking)
Marketing assistance

Big box
Small retail
Mail order
E-commerce

Retailers

Information
Training
Financial incentives
(sales and stocking)
Marketing assistance

Downstream

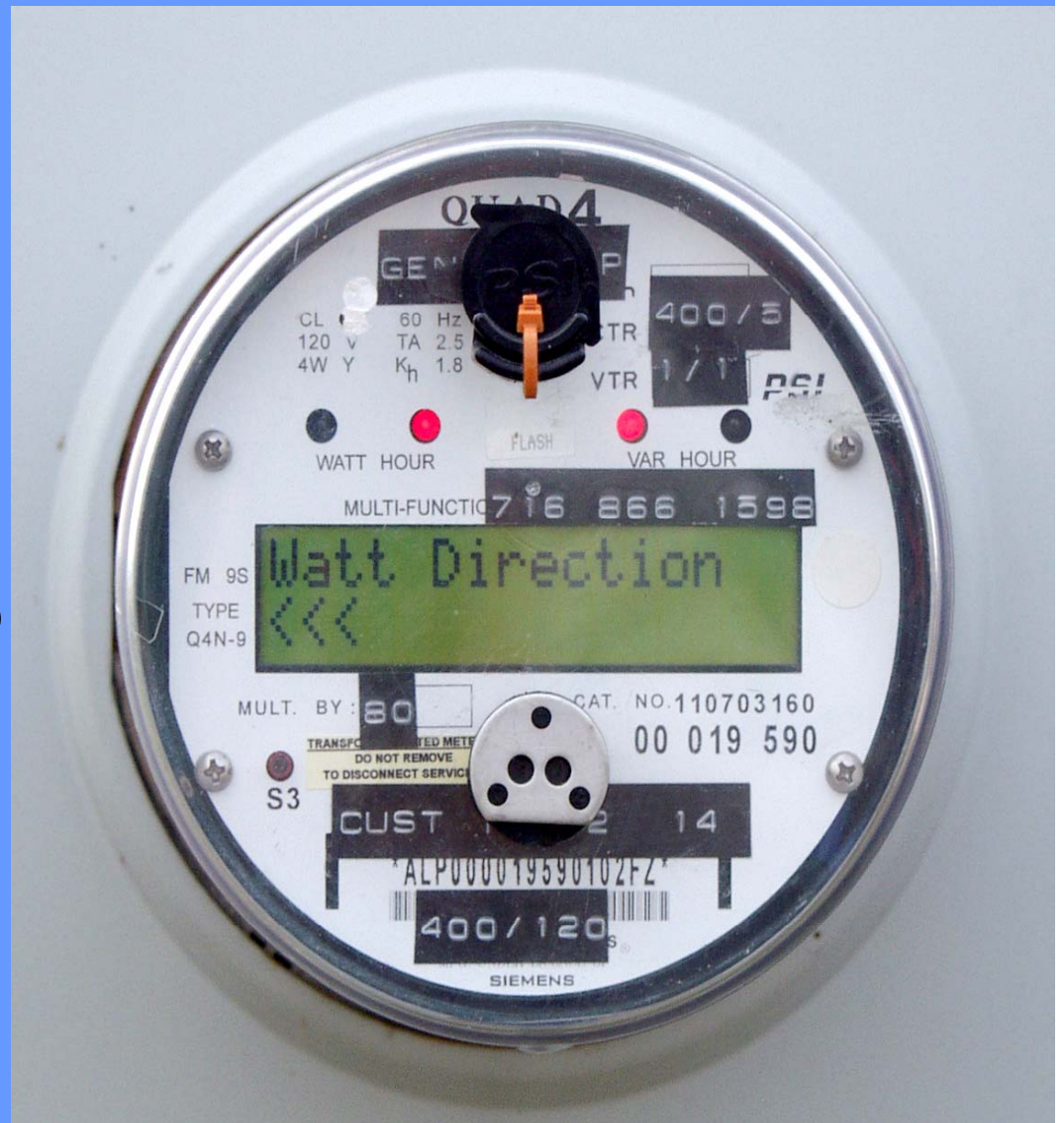
Consumers
Final consumption

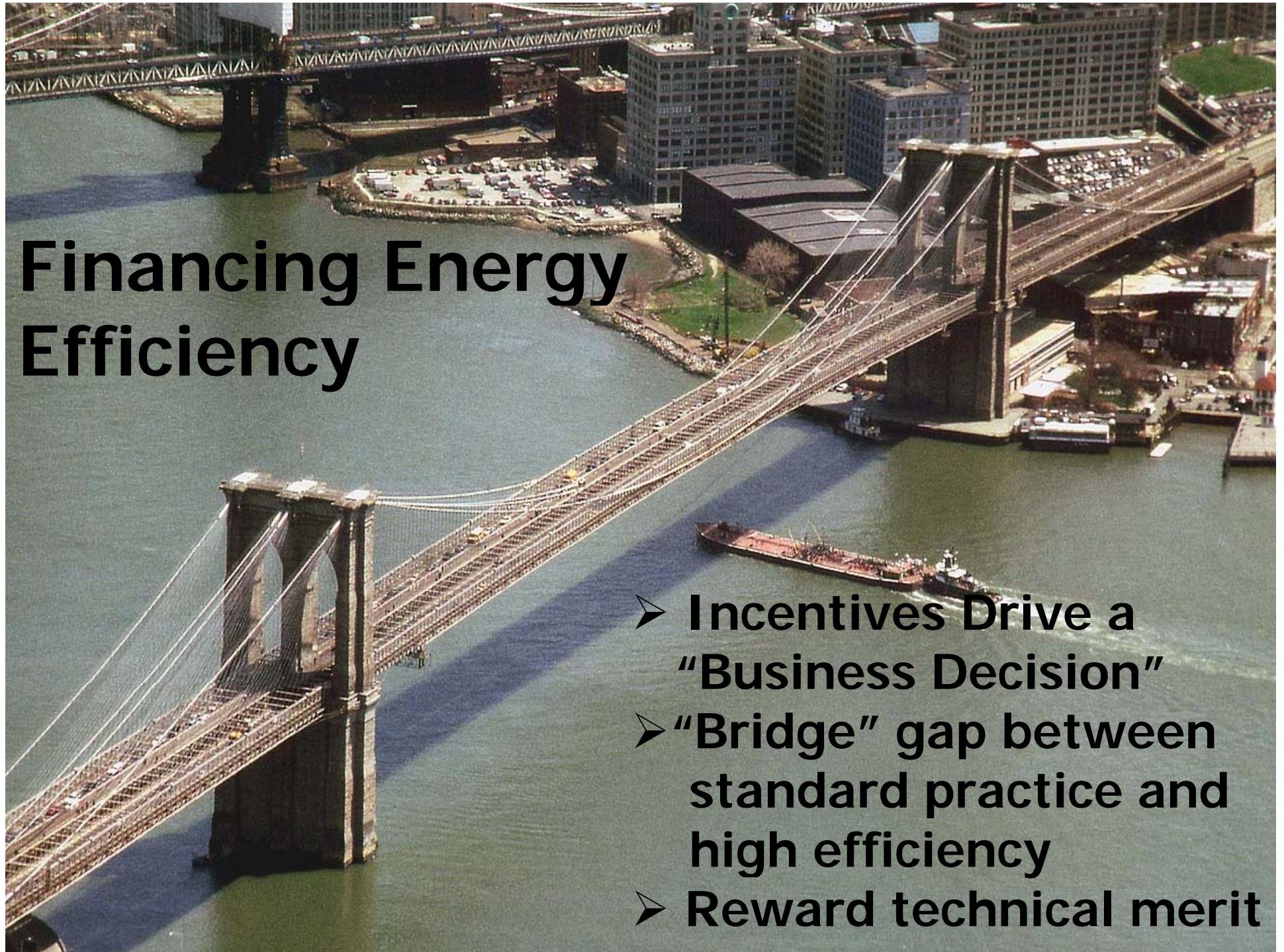
End-Users

Financial incentives
Technical assistance

Demand Response, Energy Efficiency, Renewable Technology

- Market transformation
- Customer Choice
- Grid reliability
- Economic Development
- Environmental Stewardship
- Distributed Generation

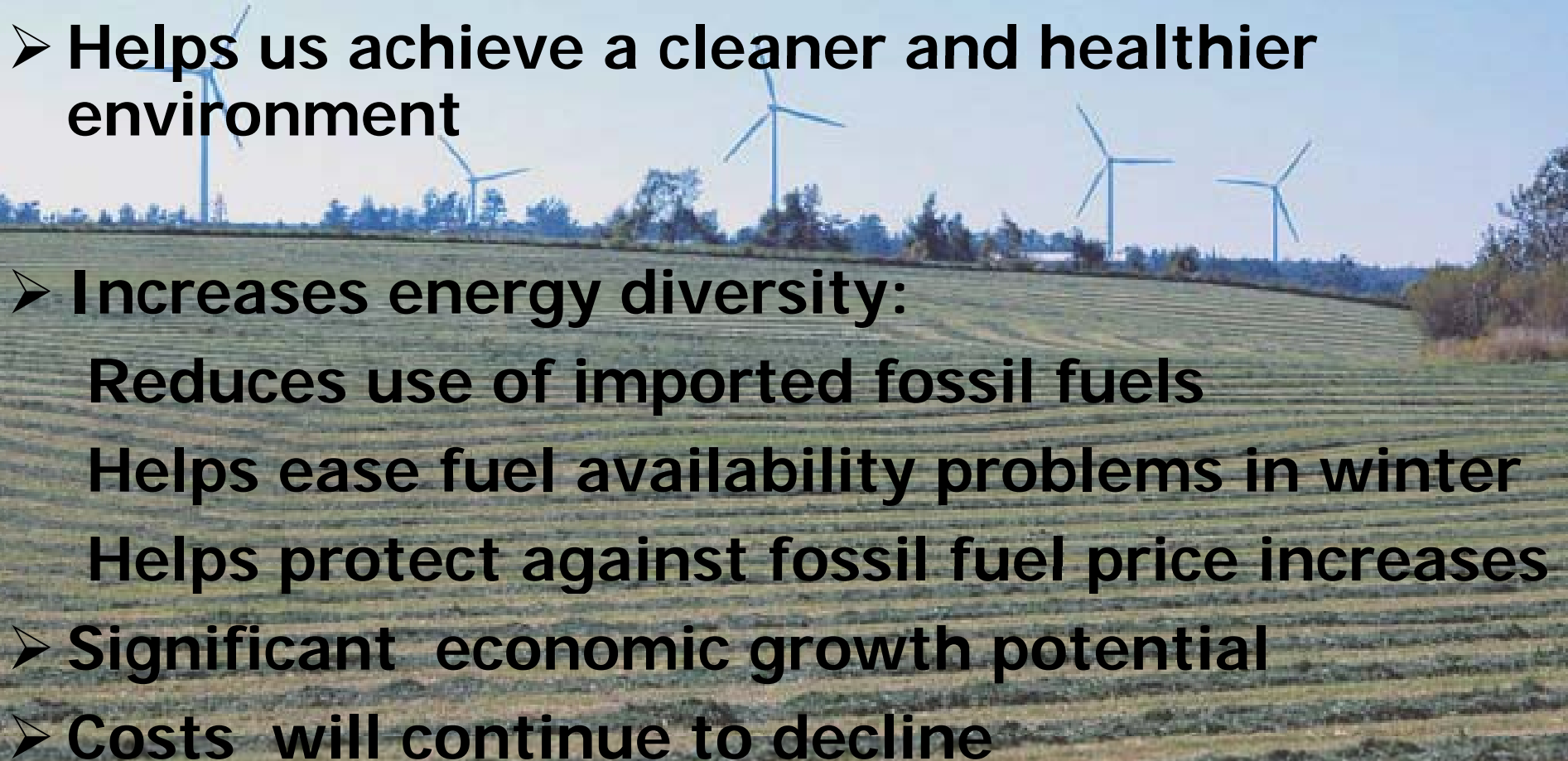




Financing Energy Efficiency

- Incentives Drive a “Business Decision”
- “Bridge” gap between standard practice and high efficiency
- Reward technical merit

Why is New York Interested in Clean and Renewable Energy?

- **Helps us achieve a cleaner and healthier environment**
 - **Increases energy diversity:**
 - Reduces use of imported fossil fuels**
 - Helps ease fuel availability problems in winter**
 - Helps protect against fossil fuel price increases**
 - **Significant economic growth potential**
 - **Costs will continue to decline**
- 

Building Infrastructure for Renewable Power

- Public/Private Partnership is Integral Component
- Net Metering for End Use Renewables
- Infrastructure to Support Technology Development
- Training and Certification Promotes Job Growth
- Financial Incentives \$ Until Market is Stronger
- Developers Need to Experience Ripe Market in Early Stages
- Inform Public on Green Power Benefits
- Tax Incentives

NYSERDA



Keys to Continued Success

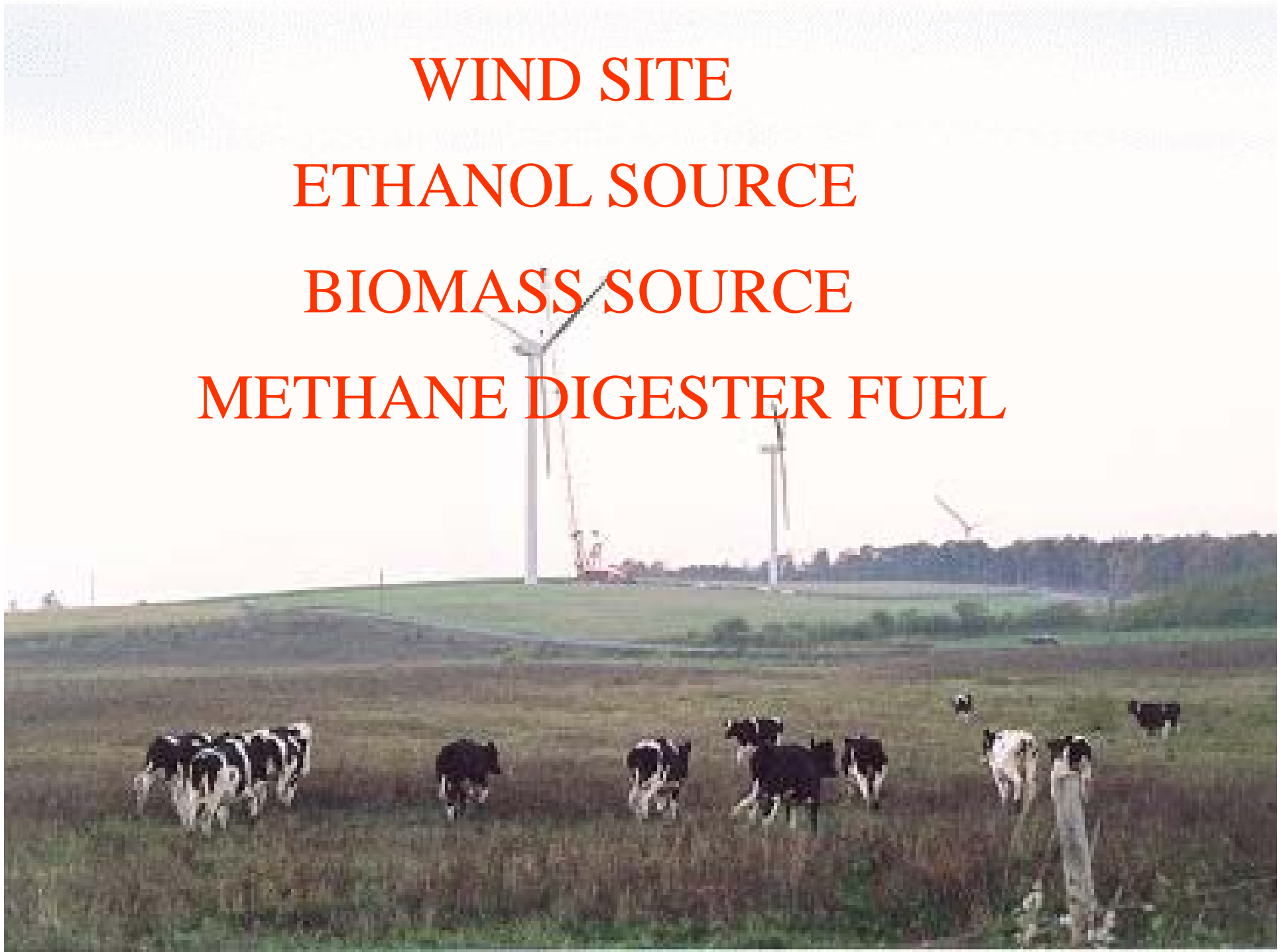


- **Use all the tools in the toolbox – Energy Efficiency, Load Management, Demand Response, Combined Heat and Power, Renewable Energy**
- **Work to create markets with strong business cases and fertile development soil – this will attract project developers**
- **Work with the middle market – ESCO's, Demand Response Providers, etc.**
- **Value Energy Efficiency and Demand Response equal to generation**





WIND SITE
ETHANOL SOURCE
BIOMASS SOURCE
METHANE DIGESTER FUEL



THANK YOU

1-866-NYSERDA

www.nyserda.org

www.getenergysmart.org

www.powernaturally.org

