

Steps to Developing the New Orleans Strategic Energy Plan

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National Renewable Energy Laboratory



Only national laboratory ***dedicated*** to renewable energy
and energy efficiency R&D

Research spans fundamental ***science*** to ***technology*** to
policy and ***market*** solutions

New Orleans Support:

Funded by U.S. DOE to provide technical and policy
expertise to assist in developing energy strategies for
recovery and rebuild

- Schools - Residential - Municipal - Energy Policy

Presentation Overview

- Strategic energy planning: why and how?
- Next Steps for New Orleans Strategy Development
- Suggestions for immediate implementation
- Next steps for immediate implementation

What is a strategic energy plan?

A broadly accepted, goal-oriented, comprehensive plan to strategically guide energy decision making

Why strategic energy planning?

- Harmonize current activities
- Maximize program impact
- Minimize duplication of effort
- Minimize cost impacts

Typical Strategic Energy Planning Process

Typical Objectives

- Energy Reliability
- Minimize Environmental Impacts
- Supply Diversification
- Use of Local Resources
- Economic Development
- Green Collar Workforce
- Energy Affordability

Typical Stakeholders

- CHAMPION
 - Utility
- Government: City Council and Mayor's Office
- Community Businesses and Industry
 - NGOs
 - Citizens

Develop a common energy vision

Develop a community energy baseline

Identify and evaluate resource options

Demand-Side Options

Supply-Side Options

Integrate supply and demand alternatives: develop a ranking system incorporating baseline and objectives

Strategic Energy Plan

Programs & Projects

Evaluation

Develop Common Energy Vision

Establishes priority for community

Involves all stakeholders

Can be general or specific - longer term

Translate to action

Develop Common Energy Baseline

Need not be absolute, but used as
benchmark to measure progress and to
rank program opportunities

New York City

Purpose: Assuring reliable, affordable, and clean electricity is essential to the continued attraction and retention of [New York] businesses and residents. Requires 2,600 MW new resources.

The Task Force arrived at a comprehensive program of action consisting of 28 specific recommendations in four principal areas: energy supply, distributed resources, energy delivery and leading by example in municipal government

NYC Status Report

NYC ENERGY POLICY TASK FORCE
2006 STATUS REPORT

#	Recommendation	Category	Update 2006	Status
4	Support the development of appropriate transmission lines	Energy Supply	Con Edison is preparing to begin construction on a new 345 kV feeder from Sprain Brook, north of Yonkers, to the new Sherman Creek Switching Station in Upper Manhattan. The project will address significant load growth in the Bronx and Upper Manhattan, and increase the total transfer capability into the City by about 345 MW. The City of New York is providing support and working with Con Edison on siting issues and approvals for the feeder and switching station.	Launched
			Con Edison completed their "System Reliability Assurance Study" (SRAS) in December 2005. The study shows that New York City and Long Island will not need new resources until 2012, and possibly as late as 2014 depending on the success of demand-side initiatives adopted by the PSC. The study indicates that Distributed Resources and new transmission capacity may be cost-effective methods to meet future requirements. The study may be viewed at - http://www.nycosdc.com/Business_Incentives/Energy/srasreportdec2005.pdf	Complete
			The 2005 Energy Policy Act requires the Federal Energy Regulatory Commission (FERC) to create national mandatory electric reliability standards. The City of New York and other EPTF members were successful in securing language in the Act that preserves New York State's right to set reliability standards that are more stringent than those for the rest of the country. In 2006, the City of New York and other EPTF members will continue to work with FERC in the implementation of those standards.	Complete
			The City of New York, Con Edison, and several other members of the EPTF are participating in and supporting the New York Independent System Operator's (NYISO) ongoing Comprehensive Reliability Planning Process. The purpose of the planning process is to determine future New York State electric reliability needs and to request market-based solutions, including alternative regulated solutions, as well as backstop solutions from the responsible transmission owners to meet the identified reliability needs.	Substantially Complete
			In March 2006, the City of New York publicly urged the federal Department of Energy to designate a New Jersey to New York City electric transmission priority pathway as a National Interest Electricity Transmission Corridor (NIETC). Such a designation would serve as a means of reducing regulatory uncertainty for developers of transmission facilities. In addition, the City of New York has recently taken steps to encourage the FERC to help create incentives that will facilitate investment in new transmission lines.	Launched
5	Support diversity of fuel supply	Energy Supply	Broadwater Energy filed an application with FERC in January 2006 for the construction of a proposed liquefied natural gas facility in Long Island Sound. Several members of the EPTF have intervened in the FERC proceeding.	Launched
			EPTF member KeySpan Energy has taken an equity interest in the Millennium Pipeline that is projected to reach New York City in its second phase of development. In August 2005, Millennium Pipeline Company filed an application with the Federal Energy Regulatory Commission (FERC) to allow it to initiate Phase I of construction from Corning to Ramapo, New York. The application is currently under review at FERC.	Launched

Toronto: Change is in the Air

TORONTO'S GREENHOUSE GAS AND SMOG EMISSION REDUCTION TARGETS

TORONTO'S REDUCTION TARGETS FOR GREENHOUSE GAS EMISSIONS, FROM THE 1990 LEVELS OF APPROXIMATELY 22 MILLION TONNES PER YEAR FOR THE TORONTO URBAN AREA, ARE:

6% BY 2012 (THE "KYOTO TARGET")

30% BY 2020

80% BY 2050

THE REDUCTION TARGET FOR LOCALLY GENERATED SMOG CAUSING POLLUTANTS IS 20%, FROM 2004 LEVELS, BY 2012 FOR THE TORONTO URBAN AREA.

Goal: Reduce climate change impact, become the renewable energy capital of Canada

Strategy: Public Education, Stakeholder driven action plans, municipal leadership, tree planting

Funding: Approximately C\$40 per year per resident (less in out years)

Challenge: buy-in

Success: Civic Pride

New Orleans Strategic Energy Planning Process



Develop Common Energy Vision

- Mayor's office has roadmap in development
- City Council Efficiency Resolution
- Task Force has vision statement
- Others?

Develop Common Energy Baseline

- Entergy annual reports
- Necessary data could be collected as needed or through program development

Next Steps for Strategic Energy Planning

- Convene core stakeholder group to harmonize vision
- Identify Needs and Develop common energy baseline
- Use baseline to evaluate available options
- Develop implementation strategy for viable options

OUTCOME : A program with broad acceptance that works for New Orleans

Consider: Mediated master planning

In the meantime...

- Rebuild is now!
- Hedge against future fuel price volatility and high prices
- Interested stakeholders: Entergy, City Council, Mayor's office, Task force
- Provides early successes
- Acting now has the benefit of supporting larger scale strategic planning process by keeping interest lively and **illustrating impact**

What's effective now?

Energy efficiency programs: 2 examples
with tangible savings

How to choose?!

NREL next steps for policy information
development

New York: Be Cool!

- \$35-\$100 “Bounty” on old air conditioners implemented by utility
- 10-40% energy reduction without behavioral shift
- Users also received federal and state incentives on efficient units
- Funding: rate payer charge

Berkeley Efficiency and Solar Program

- Program: Bond provides low interest loans to property owners that are rolled into property taxes
- Duration: Late 2008
- Funding and Source: City level bond
- Successes: Specific marketing to multi-family unit owners to describe benefits
- Necessary elements: Bond, financial institution or private funder to provide initial investment

Similar Programs: Live Green Toronto

<http://www.cityofberkeley.info/mayor/GHG/solar.htm>

Next steps for immediate programs?

- Opportunities identified from current efforts
 - Building code enforcement
 - Energy efficiency resolution programs
 - Voluntary green power program assistance
- Evaluate costs (and potential funding sources), impacts, and applicability
 - Contributes to energy baseline
 - Ensures programs with real energy impact
 - Inform policy development

Resources

- Consortium for Energy Efficiency: Entergy (parent) is a member
- NREL Program and Policy Technical Assistance
- National Action Plan for Energy Efficiency (NAPEE)
- Integrate Students for baseline studies
- Consider professional master planning facilitators

Questions?

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Greensburg, Kansas

Strategy: Stakeholder driven
long-term specific
community action plan

Challenge: 95% destruction

Funding: USDA, State,
solicitation

Success: Large percentage of
community participating,
City Council adopted
resolution that all city-
owned buildings will be
LEED Platinum

Inspiration: “Although
this storm was
devastating to our
community, we are
presented with an
incredible opportunity
to show the world our
strength and to create
a new future for those
who will live here.”