

# Green Mountain Power ENERGY PLAN

It's About:

- Cost
- Carbon
- Reliability

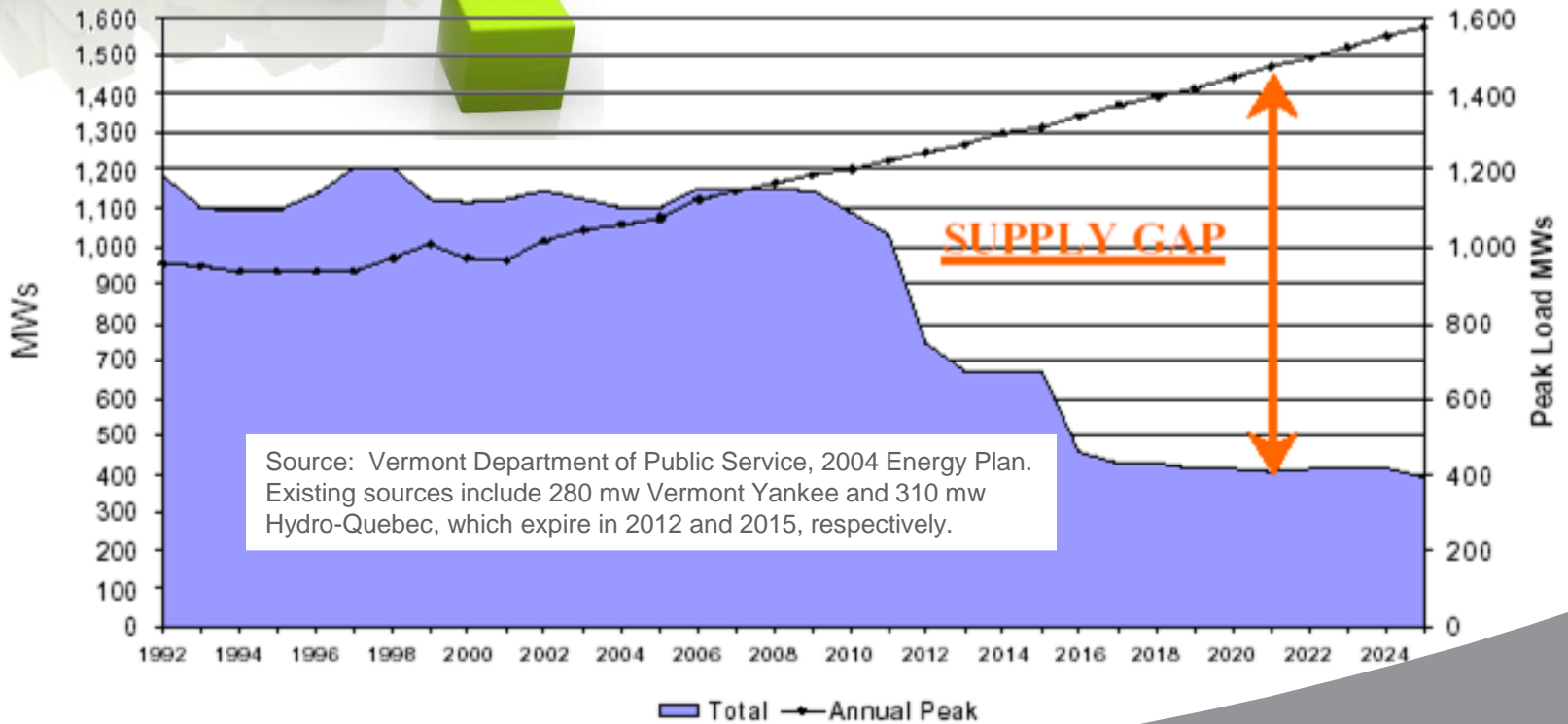
# THE CHALLENGES



- ▶ Three-quarters of total power contracts expire in 2012 and 2015
- ▶ We must replace these low cost, low emission base load power contracts
- ▶ In-state renewable energy & efficiency alone will not fill the void
- ▶ New generation built in Vermont must overcome:
  - ▶ Regulatory process
  - ▶ Economics
  - ▶ Public acceptance

# THE CHALLENGE

# SUPPLY GAP



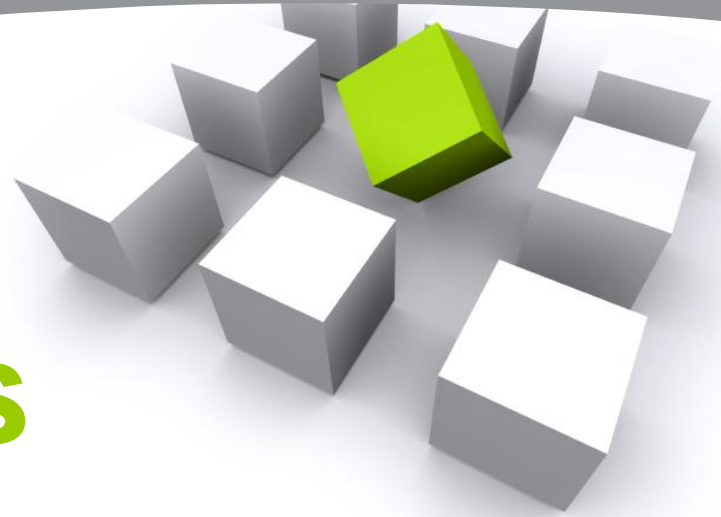
# GMP – ENERGY PLAN



- Major factors considered in determining electricity portfolio
  - Cost
  - Carbon
  - Reliability

Energy Future

# The Goals



- ▶ **Maintain a low carbon profile**
- ▶ **Stably priced and reliable power**
- ▶ **Use cost-effective efficiency and demand response to reduce load**
- ▶ **More in state generation**

# Meeting the Goal **COST, CARBON & RELIABILITY**

- ▶ **Aggressively purchase and build new renewable generation**
- ▶ **Renegotiate power contract with Hydro-Quebec**
- ▶ **If VY is relicensed, negotiate a favorable PPA and ramp down dependence**
- ▶ **Invest in efficiency and demand side management**

# Cost Effective

## RENEWABLE ENERGY STRATEGY

- **Utility-Owned Generation:**
  - **GMP can build solar for less than Standard Offer**
  - **Utility-owned wind can yield long term stable price that decreases over time**
- **Request For Proposals (CV & GMP) yields interesting prospects for renewable energy contracts**
- **Pursuing contracts with renewable developers (primarily wind) in Vermont & New England.**

# On Track **TO EXCEED** Goal of 18% New Renewable **BY 2032**

- New renewable generation could reach 16% of GMP portfolio within 5 years
  - Depending on PPA negotiations, project permitting
- Add existing hydro, Searsburg, biomass, total renewable could reach 28% in 5 years
  - Not including large hydro like Hydro-Quebec
- Expect to meet SPEED goal and avoid Renewable Portfolio Standard

# VERMONT YANKEE

## RAMP DOWN STRATEGY

- Reduce purchases from Vermont Yankee in 2012, decrease further over 20 years
- Allows time and flexibility to develop new renewable resources while keeping costs lower
  - Avoid market contracts that would feature more air emissions & more price volatility
- But plant must be deemed safe to operate and new Vermont Yankee contract must provide value to our customers.

# HYDRO QUEBEC

- ▶ Leverage Vermont's unique geo-political relationship with Quebec and Hydro Quebec
- ▶ Negotiate long-term contract with value for VT
- ▶ Invest in new VT transmission infrastructure to:
  - ▶ Allow more non-carbon base-load power into Vermont
- ▶ Stable complement to intermittent wind sources

# HYDRO QUEBEC Update

- Contract announced in August, now in 248 approval process
- Value proposition for additional low carbon, reliable power at favorable price
  - proposed transmission through NH would bring more power to region
  - Large hydro renewable designation approved by Vermont legislature

# SUMMARY

- ▶ New renewable generation is in Vermont's future, utility-owned is the most cost effective model
- ▶ Investing in appropriately-sized renewable generation benefits customers
- ▶ GMP is in position to exceed its goals on renewables
- ▶ Long term agreement with HQ reached
- ▶ If VY is relicensed with a low-cost contract, VY can provide a bridge to a renewable energy future
- ▶ System power as a replacement source is available, but more CO2 intensive and more volatile pricing

