



# International District Energy Association

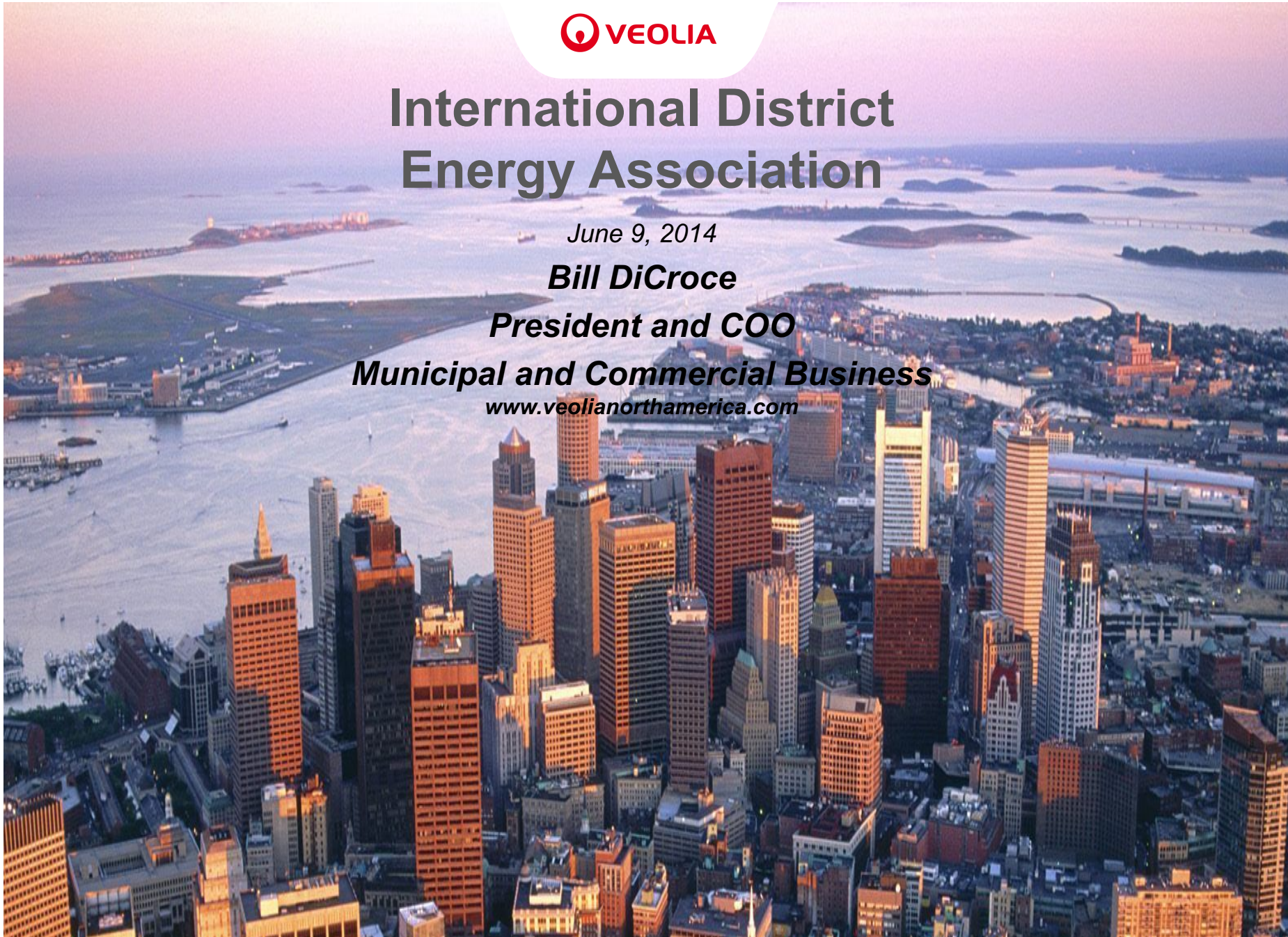
*June 9, 2014*

***Bill DiCroce***

***President and COO***

***Municipal and Commercial Business***

***[www.veolianorthamerica.com](http://www.veolianorthamerica.com)***





# Global Environmental Leader

- World's leading environmental services company

- *\$31 billion in annual global revenue*
- *220,000 employees*
- *No. 1 largest environmental firm*
- *No. 1 in water partnerships*

- North America

- *\$2.6 billion in annual revenue*
- *8,250 employees*

- Municipal & Commercial Business

- *No.1 district energy portfolio in the US*
- *No. 1 water services company in the US*
- *\$1 billion in annual revenue*
- *3,800 employees*
- *200 cities*



# Municipal & Commercial Solutions

**Veolia delivers essential water, energy, and waste solutions to cities and campuses.**



# Long-Term Investor



## ○ **Veolia Commitment to Boston**

- *Municipal & Commercial HQ*
- *Boston and Cambridge district energy networks*
- *MATEP – Longwood Medical CHP*
- *On-site CHP at Biogen Idec*

## ○ **240 Boston Employees, and Growing**

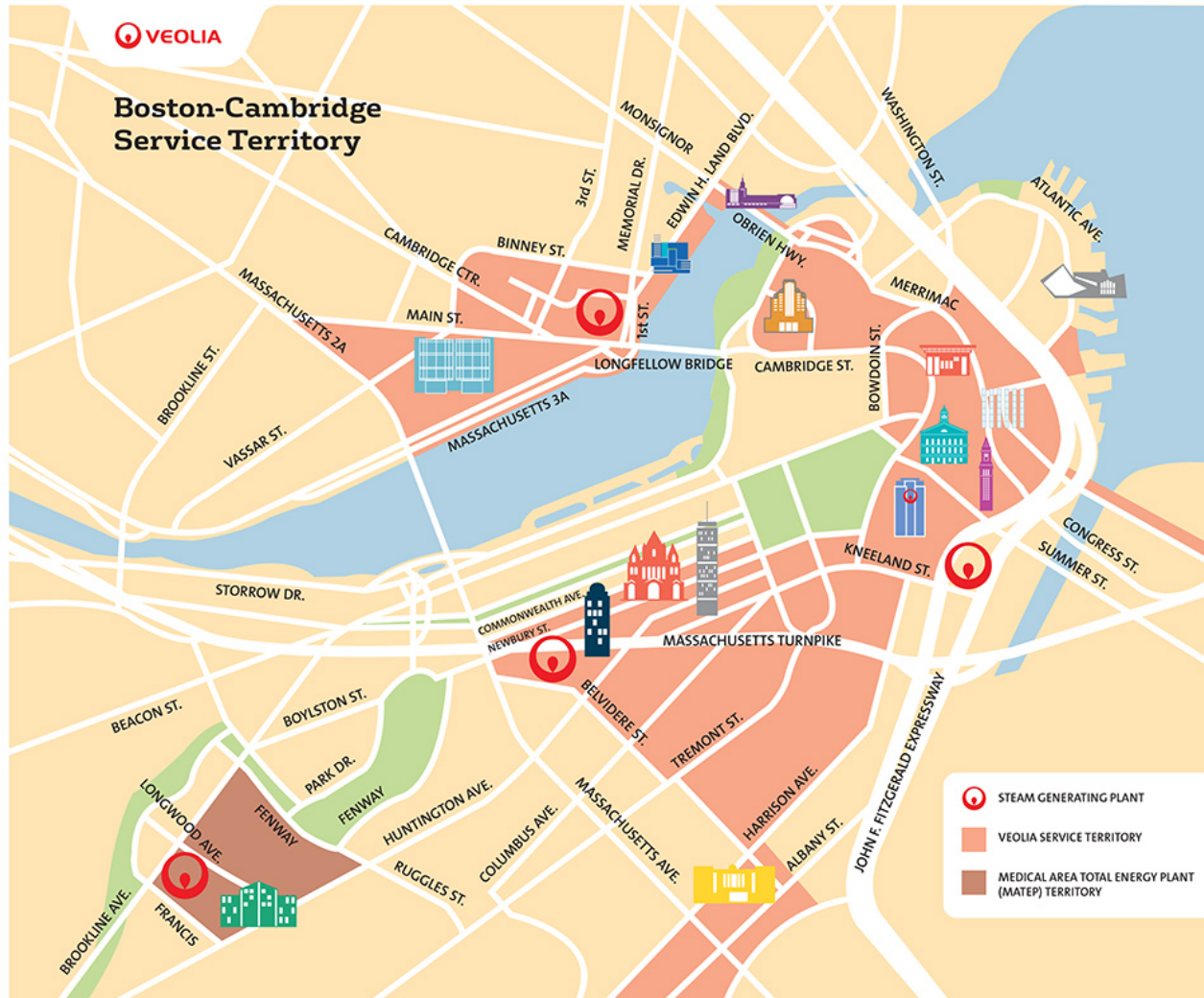
- *Signed new HQ lease at 53 State Street*
- *Participant in Boston summer jobs program*
- *670 Massachusetts employees*
- *40 Cambridge employees*

## ○ **Regional Investment**

- *Capital investment since Veolia ownership: \$168 million*



# Three Veolia Boston-Cambridge District Networks



# Boston District Energy

- 70% of high-rise office buildings in Boston – 90,000 workers
- All large healthcare facilities in Boston – 1,740 hospital beds
- Hotels in Boston
- Universities in Boston
- Biotechnology and Pharmaceutical leaders in Cambridge
- Nationally recognized in 2011 for adding the most sq ft for District Energy Systems in the US
- 20 million sq ft of new connections and renewals over last 3 years

**342MW**

Efficient CHP Capacity

**250**

Customers



# Kendall Station Opportunity



# Reconfiguring Kendall Station



- **Peaking plant reconfigured for base load**
- **Thermal heat discharge into the Charles River**
  - *No CHP, wasted thermal heat resource*
  - *Lawsuit from environmental groups*
- **Previous owner IPP focus**
  - *Not long-term district energy/CHP*



# Boston Green Steam Project: \$112 million



- **Kendall Station:**
  - Acquisition: \$50 million
  - Reconfiguration: \$35 million
- **Charles River Transmission Pipe :**  
\$27 million
- **Job Creation:**
  - *\$21 million in labor costs*
  - *147,500 man hours – welders, pipe fitters, insulators*

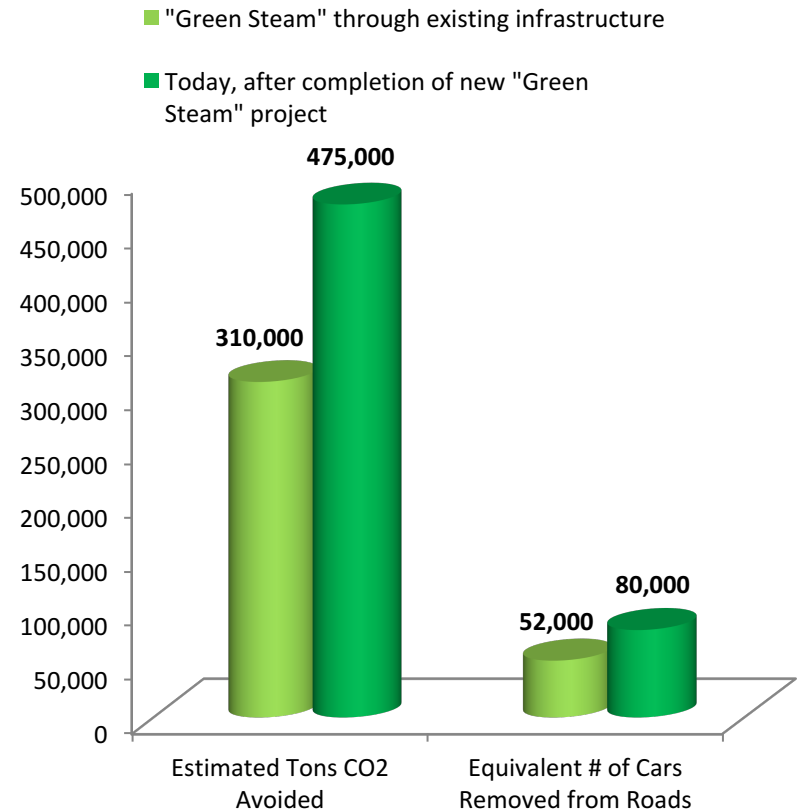
# Reducing Boston's Carbon Footprint

## ◦ Carbon Impact

- *Reduces carbon emissions by 475,000 tons/year, equivalent to:*
- *Removing 80,000 cars from the streets annually*
- *Installing 600 football fields of solar PV*

## ◦ Other Project Benefits

- *75% of Boston's heating district requirements*
- *Eliminates waste heat from the Charles River ecosystem*





# Massachusetts – State Policy



- **Green Communities Act of 2008**

- *Requires utilities to invest in energy efficiency measures*
- *Alternative Energy Portfolio Standard (APS) established January 1, 2009*
- *Made Kendall acquisition feasible; AECs credits for incremental useful output*

- **MA Department of Energy Resources (DOER)**

- *New program - Energy Resiliency for Climate Adaption Initiative*
- *Funded by \$40M in Alternative Compliance Payments (ACP)*
- *Asset hardening includes district energy*

# Massachusetts – Local Policy

- Cambridge Zoning

- *Planned Unit Development (PUD) District zoning*
  - *Kendall Square PUD-5 District Zoning (26 acres), adopted 4.08.13: “A Development Proposal for a commercial building shall include a study, prepared by the Developer, considering the feasibility of connecting the building identified in the Development Proposal to the existing district steam system”.*

- Stretch Energy Code

- *MA Stretch Energy Code: buildings reduce energy by at least 20% over the state code*
  - *Based on ASHRAE 90.1, does NOT credit benefit of CHP*





A blurred image of a person walking from left to right in the foreground. In the background, a large, three-dimensional red Veolia logo is mounted on a blue wall. The logo is illuminated by spotlights, creating a bright glow. The overall scene suggests a modern, high-tech environment.

**Innovative environmental solutions  
in energy, water and waste**