What’s the Next Generation of Innovation for Multifamily?

2017 NMHC Annual Meeting

January 24-26, 2017
WHAT'S THE NEXT GENERATION OF INNOVATION FOR MULTIFAMILY?

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Corporate Sustainability Strategies, Inc.

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Equity Residential

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Black Bear Energy

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National Real Estate Advisors
EQUITY RESIDENTIAL PORTFOLIO 2016

Note: As of 6/30/16.

(1) Includes Los Angeles, San Diego and Orange County.

Represents percentage of Stabilized NOI.

**Seattle**
- 37 Properties
- 7,096 Units
- 78% NOI - Mid/Highrise
- 22% NOI - Garden

**San Francisco**
- 54 Properties
- 12,756 Units
- 49% NOI - Mid/Highrise
- 51% NOI - Garden

**Southern California (1)**
- 93 Properties
- 22,407 Units
- 42% NOI - Mid/Highrise
- 58% NOI - Garden

**New York**
- 40 Properties
- 10,632 Units
- 95% NOI - Mid/Highrise
- 5% NOI - Garden

**Boston**
- 30 Properties
- 7,588 Units
- 81% NOI - Mid/Highrise
- 19% NOI - Garden

**Washington, D.C.**
- 47 Properties
- 15,637 Units
- 90% NOI - Mid/Highrise
- 10% NOI - Garden
Higher Walkscores Indicate Lower Necessity To Drive

Most Errands Can Be Accomplished On Foot

Some Errands Can Be Accomplished On Foot

Most Errands Require A Car

<table>
<thead>
<tr>
<th></th>
<th>EQR</th>
<th>AIV</th>
<th>AVB</th>
<th>ESS</th>
<th>UDR</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>75</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>55</td>
<td>50</td>
<td>35</td>
</tr>
</tbody>
</table>
CLEAN ENERGY POWERS THE EQUITY PORTFOLIO
Creates Desirable Economic and Environmental Returns

clean energy sites now power the Equity portfolio with 27 more planned
S4 combines technologies for maximum NOI

1. **SMART**
   - Reduces property energy demand at key times based on a combination of property and weather data

2. **SOLAR**
   - Property creates its own energy directly from the sun

3. **STORAGE**
   - Property stores energy in giant batteries for use at key times when energy is most expensive

4. **SYSTEM**
   - 3 Components are integrated to optimize whole system performance
26 SITES POWERED BY COGENERATION
Onsite Combined Heat and Electricity Generation

Cogeneration Systems Provide Heat and Electricity

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Energy Supply</th>
<th>Energy Processing</th>
<th>Energy Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Cogen</td>
<td>Natural Gas Utility</td>
<td>Boiler: Hot Water, Cooler Water</td>
<td>Hot Water and Building Heat</td>
</tr>
<tr>
<td></td>
<td>Electric Utility</td>
<td></td>
<td>Cooling, Lighting, Etc.</td>
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<tr>
<td>With Cogen</td>
<td>Natural Gas Utility</td>
<td>Boiler: Hot Water, Pre-heated Water</td>
<td>Hot Water and Building Heat</td>
</tr>
<tr>
<td></td>
<td>Electric Utility</td>
<td></td>
<td>Cooling, Lighting, Etc.</td>
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</tbody>
</table>

Prism at Park Avenue South – New York, NY, one of our properties using cogeneration.
LIGHTING PROJECTS CREATE VARIETY OF BENEFITS
Innovation and ESG

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NATIONAL’S PROFILE

• Headquartered in Washington, D.C.
• An SEC registered investment advisor
• Net assets under management: $2.7 billion / 58 investments
• Specializes in executing build-to-core strategies, including through an open-end, core-plus fund
• Invests in most major real estate sectors—mixed-use, apartments, office, retail, industrial, hotels and data centers
• Focuses investments on leading U.S. urban markets
• 50 employees—with offices in Chicago, Dallas, Los Angeles, Philadelphia, and Phoenix
• Wholly owned by a subsidiary of the National Electrical Benefit Fund, a major U.S. pension fund with more than $12.9 billion total net assets
• Since January 1, 2000, in the aggregate, all assets managed by the professionals at National have generated an average annual gross return of 10.27% 4,10

As of 9/30/2016
1,2,3. Please refer to “Company End Notes” page of this presentation.
4. National has operated as an investment advisor since January 2010. In addition, National’s key managing members generally worked together at National’s predecessor firm, NEBF Real Estate from 2000 through 2010. This performance measurement uses the annualized time-weighted methodology. The return is a gross return as a fee structure was not in place for NEBF Real Estate from 1/1/2000 through 1/1/2010.
10. Please refer to “Performance End Notes” page of this presentation.
2000
NEBF establishes National Real Estate Advisors as a subsidiary to manage real estate investments for other institutional investors—public funds, endowments and foundations.

2010
National establishes a commingled open-end vehicle for pension fund investors, the INDURE Build-to-Core Fund.

2013
National formalizes its development activities and launches National Real Estate Development.

2016
National’s INDURE Build-to-Core open-end fund grows to $2.1 billion net assets under management with 60 investors.³

As of 9/30/2016
3. Please refer to “Company End Notes” page of this presentation.
URBAN MARKET FOCUS

National invests in leading U.S. urban markets with barriers to entry, diversified economies, mass transportation networks and high levels of intellectual capital.

As of 9/30/2016

1. The market value of National Managed real estate investments is not inclusive of Fund-level cash and other net assets.

Note: Based on the Top 10 Metropolitan Statistical Areas (MSA’s) represented by NPI investments. MSA’s are defined by the U.S. Office of Management and Budget.

83% of National’s portfolio (by market value) is located in primary urban markets.

These markets tend to have similar characteristics:

- High levels of intellectual capital
- Population growth
- Job growth and job stability
- Strong transportation networks
- Supply constraints
- High barriers to entry for developers
COMMITMENT TO ESG BEST PRACTICES

ESG policies at National help buttress investment performance and produce competitive returns over time.

ENVIRONMENTAL

- Sustainable development and management practices lead to more efficient operations and healthier building environments for tenants.
- National demonstrates strong year-over-year improvement against its peers, earning Green Stars from the GRESB benchmarks for 2015 and 2016.

SOCIAL

- Produces good jobs for workers and good work for contractors through our responsible contractor policy.
- More than 34 million well-paying labor-hours created since 2000.1*
- Recognized by Pensions & Investments as one of the “Best Places to Work” in Money Management. (2014, 2016)

GOVERNANCE

- Seeking to maintain the highest fiduciary standards in dealing with all aspects of our business.
- Adopting programs and strategies aimed at advancing ESG measures and engaging stakeholders in a collaborative manner.

As of 9/30/2016

1. Please refer to “Company End Notes” page of this presentation.

*National calculates labor-hours internally using assumed labor rates and percentages based on hard cost information generally provided by partners, borrowers or general contractors.
THE BLOC
LOS ANGELES, CALIFORNIA

- Leased over 300K sf in first 24 months at rates +/- 10% over neighboring properties during heavy construction
Redevelopment plan consisted of
- Removal of retail atrium roof
- Establishment of vibrant community space
- Creation of contemplative private spaces
- LEED® Silver cert. during redevelopment

Office tower is the premiere Class A building in downtown LA to provide:
- Pet friendly access
- Rooftop Lounge
- Wellness programs offering tenants free yoga classes with brown bag lunch lectures by local doctors

The first comprehensive mobility hub in LA
- Direct Metro access
- Downtown bike sharing program
- Electric car charging stations
- Bike valets

WELL® Certification Pilot –
- TRC corporate offices
- Bloc marketing suite and Office building’s core and shell
- Hotel has been built with Stay Well Rooms
- The goal is to create an entire Well Certified block
EAST MARKET
PHILADELPHIA, PA

KEY STATS

Property Type: Mixed-Use
Total Estimated Project Cost: $620,000,000
Square Feet/Units: 773,000 SF (current construction & existing buildings)
Status: Development

Note: All figures as of 9/30/2016
ONE CONGRESS
BOSTON, MA

KEY STATS
Property Type: Mixed-Use
Total Estimated Project Cost: $2,000,000,000
Square Feet/Units: Approved for 2,300,000 SF
Status: Operating / Pre-development

Note: All figures as of 9/30/2016
JOURNAL SQUARED
JERSEY CITY, NJ

KEY STATS

<table>
<thead>
<tr>
<th>Property Type:</th>
<th>Apartment</th>
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<tr>
<td>Total Estimated</td>
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<tr>
<td>Project Cost Phase I:</td>
<td>$284,514,636</td>
</tr>
<tr>
<td>Total Estimated</td>
<td></td>
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<tr>
<td>Project Cost Phase II:</td>
<td>$429,624,000</td>
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<tr>
<td>Total Estimated</td>
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<tr>
<td>Project Cost Phase III:</td>
<td>$425,440,000</td>
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<tr>
<td>Total Estimated</td>
<td>$1,139,578,636</td>
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<tr>
<td>Project Cost:</td>
<td></td>
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<tr>
<td>Square Feet/Units:</td>
<td>538 units (1st phase) /</td>
</tr>
<tr>
<td></td>
<td>1,843 units (total estimated)</td>
</tr>
<tr>
<td>Status:</td>
<td>Development / Pre-development</td>
</tr>
</tbody>
</table>

Note: All figures as of 9/30/2016
Philadelphia Navy Yard Project
Philadelphia Navy Yard Project

- 46% Electricity
- 47% Heating
- Cooling
- CO₂

The Navy Yard

Data Center

Indoor Vertical Greenhouse
Indoor Vertical Farming

• Lowered CO₂ cost through recycled exhaust gas

• Optimized growing conditions in a lab-like environment:
  • 30 harvests per year vs. 2-3 in the field
  • No seasonality or weather risk
  • Uses 95% less water
  • 50% less fertilizers
  • zero pesticides, herbicides & fungicides

• Lower transportation costs & pollution

• Creating local jobs
Philadelphia Navy Yard Project

A Data Center

- Developed and operated by Sabey
- Utilizes the cheap power from our on-site natural gas engine
- The natural gas combustion exhaust heat is converted to cooling and used for the Data Center heat load
- Use the local energy grid for back-up power
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A NEW RELATIONSHIP WITH ELECTRICITY

Utility Driven (late 1800s – present)
- Generation
- Transmission
- Distribution
- Rate Payer

Customer Driven (early 2000s – present)
- Generation
- Transmission
- Distribution
- Customer
OUR FOCUS

25+ CLIENTS

2.5B+ SQFT

4 TECHNOLOGY VERTICALS

SOLAR

ENERGY STORAGE

LED

FUEL CELL

1x RFP PER WEEK

www.blackbearenergy.com
TYPICAL SOLAR PROJECT STRUCTURE

XYZ Solar, LLC

- Landlord
- Off-Taker
- Engineer Procure Construct
- Lender
- Utility
- O&M Provider

www.blackbearenergy.com
Energy storage system targeting the reduction of peak demand

1.30MW / 2.52 MWh total system size

Installed at 2 locations on Park Place site

Annual Numbers:
$91,552 estimated savings
$68,664 guaranteed savings
$22,888 payment

Provider is STEM (www.stem.com)

STEM builds, owns & operates the energy storage system

Commercial operation Q4-2016

Demand charges
based on highest 15-minute peak each month

Energy charges
Based on total amount of energy used

www.blackbearenergy.com
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