WHAT ARE THE DEMAND DRIVERS?

- High quality indoor environments
- Improved resiliency
- Reflection of occupier's commitment to sustainability
- Attraction and retention of staff
- Attraction of high quality tenants, those with ESG commitments and clean-tech, fin-tech, and other-tech companies
- Potential for higher effective rents
- Lower lifecycle cost coming into focus

Starts in New Construction and Owner Occupier projects ........
THE RMI INNOVATION CENTER: THE FIRST ZNE & PASSIVE HOUSE CERTIFIED OFFICE

HIGHLIGHTS
• Type: single tenant owner occupied office
• Size: 15,610 SF
• Location: Basalt, Colorado
• Year built: 2015
• Energy data:
  – Targeting < 16 kBtu/SF/yr
  – 83 kW Solar
• Beyond zero energy: PHIUS 2015+ Certification, LEED Platinum and ILFI ZEB
NZE Cost premium: 10.8% (excluding Solar)

“This building will create delight when entered, health and productivity when occupied, and regret when departed.” Amory Lovins, RMI Co-Founder and Chief Scientist.

THE NZE MARKET INVENTORY SCALING AT THE NATIONAL LEVEL

Source: NEI
THE NZE OPPORTUNITY

RESIDENTIAL SECTOR

$33 Billion Incremental Market Opportunity by 2037

Incremental upfront cost varies from 5.2% to 11.5%

UNPACKING THE $33B NZE OPPORTUNITY:
HOT SPOTS ACROSS U.S. STATES AND CLIMATE ZONES

HOW MUCH MORE EXPENSIVE ARE NZE HOMES?

- Incremental upfront cost varies from 5.2% to 11.5%
- Annual savings to homeowners using PACE
- $33 Billion Incremental Market Opportunity by 2037

HIGHLIGHTS

- Type: Multitenant office, retail, and restaurant
- Location: Boulder, Colorado
- Year built: 2017
- Energy data:
  - Targeting < 26 kBtu/SF/yr (7 kBtu/SF/yr Plug Load)
  - 575 kW Solar
- 205 kW solar PV on southeast façade
  - Offset exterior cladding cost of $42/sf, so benefit from incremental cost
  - More cost effective than rooftop PV
- NZE Lease Structure with Energy Use Fees

BOULDER COMMONS: THE FIRST NZE MULTI-TENANT COMMERCIAL BUILDING > 100,000 SqFt
HAZELWOOD GREEN – ZERO ENERGY COMMUNITY

Location: Pittsburgh, PA
180 acres - former steel mill site
6MM gross ft² of building floor area
60% residential, 30% office, 10% other

Best-in-class design standards
Central geothermal heat/cooling
Rooftop solar power

AT A DISTRICT LEVEL THERE ARE MORE CHOICES

A NUMBER OF MAJOR COUNTRIES AND REGIONS ARE SIGNALING FUTURE POLICY AND CODE

<table>
<thead>
<tr>
<th>Country</th>
<th>Time</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>California, U.S.</td>
<td>2020</td>
<td>Building code will require all new residential buildings to be net zero energy</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>Building code will require all new commercial buildings to be net zero energy</td>
</tr>
<tr>
<td>EU</td>
<td>2020</td>
<td>'Near-zero energy consumption' required for all new buildings. Each member state must reach 20% renewable fraction, and 20% GHG reduction compared to 1990</td>
</tr>
<tr>
<td>Sweden</td>
<td>2045</td>
<td>Country will have zero carbon emissions, goal to be first 'fossil fuel free' country in the world</td>
</tr>
<tr>
<td>France</td>
<td>2020</td>
<td>All new buildings to be net positive</td>
</tr>
<tr>
<td>Finland</td>
<td>2012</td>
<td>Building code comparable to Passive House Standard, some of the most stringent building envelope requirements</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2020</td>
<td>New homes to be almost energy-neutral, and new government buildings will be energy neutral by 2019</td>
</tr>
<tr>
<td>Norway</td>
<td>2017</td>
<td>Updated building code is inline with passive house standard</td>
</tr>
</tbody>
</table>
If NZE is so compelling why has it not penetrated the mass market?

**KEY MARKET BARRIERS**

- Insufficient integrated design know-how
- Upfront cost / first cost barrier
- Multi-party split incentives
- Valuation and financial benefit recapture at resale
FINANCING STRUCTURED TO MEET THE NEED

- Dedicated to the specific need – not having to compete with other uses
- Terms linked to the aggregate asset life of measures beyond code
- Matched to savings such that the obligation stays with the beneficiary even through ownership transition
- Solves landlord / tenant split incentives
- Financially efficient

Property Assessed Clean Energy (PACE) Financing

Thank You

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Transforming global energy use to create a clean, prosperous, and secure low-carbon future.