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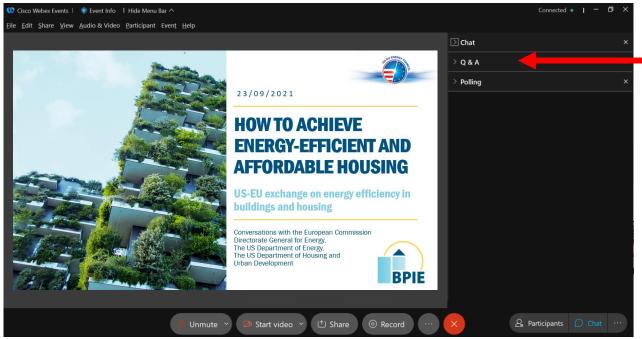
## HOW TO ACHIEVE ENERGY-EFFICIENT AND AFFORDABLE HOUSING

**US-EU exchange on energy efficiency in buildings and housing** 





## Housekeeping



- Submit your text questions and comments using the Q&A panel
- Today's presentation is being recorded and will be provided within 48 hours, along with the slide deck.





#### Keynote speeches: The role of energy efficient buildings in a just transition

- **Kim van Sparrentak**, Member of the European Parliament for the Greens/EFA group and rapporteur on the report 'decent and affordable housing for all'
- Theodore Toon, Director for Housing Efficiency at the White House Council on Environmental Quality
- Q&A

#### Panel discussion: Making energy efficiency happen – affordable housing programmes in progress

- Andrea Mancino, Executive Vice President, New York, Bright Power
- Marine Cornelis, Executive Director, Next Energy Consumer
- Maria Vargas, Senior Program Advisor, US Department of Energy
- Tanya Hristova, Mayor of Gabrovo
- Q&A

#### **Closing remarks:**

• Karel Vanderpoorten, Policy Officer Social Economy, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, European Commission





# Making energy efficiency happen – affordable housing programmes in progress



**Kim van Sparrentak** 

Member of the European Parliament for the Greens/EFA group and rapporteur on the report 'decent and affordable housing for all'



**Theodore Toon** 

Director for Housing Efficiency at the White House Council on Environmental Quality









### Kim van Sparrentak

Member of the European Parliament for the Greens/EFA group and rapporteur on the report 'decent and affordable housing for all'









#### **Theodore Toon**

Director for Housing Efficiency at the White House Council on Environmental Quality







# Council on Environmental Quality Building Emissions and Community Resilience

Executive Office of the President - Draft/Deliberative



Affordable Housing Can Lead on Efficiency Ted Toon, Director for Housing Efficiency

### **Challenges and Opportunities**

- Housing Burden: 11 million American families nearly a quarter of renters – pay more than half of their income on rent.
- Energy Burden: Nearly 1/3 of American families experience some degree of energy insecurity.
- Carbon Emissions: 35% of all emissions in the U.S. come from buildings, 55% of which comes from the housing sector.



### Strategies to Address Affordability and Efficiency

- Strengthen building codes/standards for new construction
- Deep efficiency retrofits of older housing
- Electrification/fuel switching (concurrently decarbonizing and strengthening the grid)
- Expand renewable energy installations: on-site, community/distributed, and where feasible, storage
- Technology advances and adoption
   — buildings, materials, equipment, especially heating and cooling
- New/expanded incentives for owners/tenants, cities/states
- Develop and enhance financing tools that recognize and incentivize affordability and efficiency



### **Challenges Ahead**

- Cost vs Benefits, and Cost vs Affordability
- Funding for research & development, technical assistance, building retrofits
- Land-use zoning and building codes
- Private markets/financing sources need to see the payback; role for the government and philanthropy
- Understanding our baseline utility consumption and fuel sources



# Council on Environmental Quality Building Emissions and Community Resilience

Executive Office of the President – *Draft/Deliberative* 

### Biden/Harris Commitment to Affordable Housing, Energy Efficiency, and Emissions Reductions

- New equity and debt for affordable housing through U.S. Treasury, Federal Housing Administration, Fannie Mae and Freddie Mac.
- Increased rental subsidies for neediest Americans
- Zoning reform incentives in the Build Back Better Agenda to permit more affordable construction
- Promote home ownership through financial literacy, and REO sales to low income purchasers
- Renovate 2 million homes to be energy efficient
- Target reduction of greenhouse gas emissions 50% from 2005 levels by 2030



### How We Will Advance Affordable Housing, Efficiency and Emissions Reductions

- Ongoing Executive Actions:
  - Federal Agency Programs and Actions
  - Executive Orders and White House Fact Sheets
  - Justice 40 Initiative
- Pending Congressional Action:
  - President's budget for U.S. Fiscal Year 2022
  - American Jobs Plan Bipartisan Infrastructure Bill
  - Build Back Better Agenda Reconciliation Bill



# Council on Environmental Quality Building Emissions and Community Resilience

Executive Office of the President - Draft/Deliberative



Affordable Housing Can Lead the Industry in Efficiency Ted Toon, Director for Housing Efficiency



Q&A







## PANEL DISCUSSION

# Making energy efficiency happen – affordable housing programmes in progress



**Andrea Mancino** 

Executive Vice President, New York, Bright Power



**Marine Cornelis** 

Executive Director, Next Energy Consumer



**Maria Vargas** 

Senior Program Advisor, US Department of Energy



**Tanya Hristova** 

Mayor of Gabrovo







## PANEL DISCUSSION



### **Andrea Mancino**

Executive Vice President, New York, Bright Power









## About Bright Power

Energy & water management partner for multifamily owners, developers, & operators

Improves building performance, increases resident comfort, & decreases operating costs

Founded in 2004 & works in 50 states

Offices in New York City & Oakland

Employs over 160 experts



### Park Avenue Green Team

Developer: Omni New York

Architect:
Curtis + Ginsberg Architects

Contractor: Monadnock Construction

Passive House Consultant: Bright Power

> Structural Engineer: De Nardis Engineering

> > MEP: Skyline Engineering

Real-Time Energy Management:
Bright Power



\*PHIUS+ 2015, 2015 Enterprise Green Communities, & ENERGY STAR Multifamily High-Rise Certified



### Learn More

Park Avenue Green Case Study: brightpower.com/project/park-ave-green/

Bright Power's Find, Fix, Follow Approach: brightpower.com/our-approach/

News, Blog, and Reports: brightpower.com/news-and-reports/

All Bright Power Services: www.brightpower.com/services/









## PANEL DISCUSSION



### **Marine Cornelis**

Executive Director, Next Energy Consumer







# How to achieve energy-efficient and affordable housing

affordable housing programmes in progress

## Hi! I'm Marine Cornelis

## Policy-shaker in the Energy and Climate transitions

Founder & Director of Next
Energy Consumer & Energ'Ethic
Podcast



Passionate about energy justice



**EU Climate Pact Ambassador** 





#### **EU ENERGY POVERTY OBSERVATORY**

European Commission's Observatory on Energy Poverty https://www.energypoverty.eu

#### **COST ENGAGER**

International research network on energy poverty & vulnerability <a href="http://www.engager-energy.net">http://www.engager-energy.net</a>

#### **ESRC JUST ENERGY**

Energy poverty, vulnerability and access to justice https://esrcjustenergy.wordpress.com

#### **NEON**

Network of energy ombudsmen & ADR providers <a href="https://www.neon-ombudsman.org">www.neon-ombudsman.org</a>

#### **EURICA (LEAP-RE)**

Electrification programs in Burkina Faso, Madagascar & Cameroon https://www.leap-re.eu

#### NOT ALL HOUSEHOLDS ARE THE SAME

Policies need to acknowledge people's different abilities, willingness and opportunities. Many socioeconomic factors may influence households' habits, needs and ambitions

## ENERGY EFFICIENCY & RENOVATION SHOULDN'T BE A FULL-TIME JOB

People may not be aware of the available labels, programmes, grants, subsidies and reliable contractors. We need locally managed one-stop-shops

## EFFORTS SHOULDN'T ONLY BE MADE BY THECONSUMERS

Goods and services must be sustainable and inclusive by design. Easy access to redress is a key part of trust-building







## PANEL DISCUSSION



**Maria Vargas** 

Senior Program Advisor, US Department of Energy







### **Energy Efficiency and Affordable Housing in** the U.S. – Showcasing Innovation

Maria T. Vargas

Office of Energy Efficiency and Renewable Energy



### **Energy Efficiency and Affordability in the U.S.**

- 35% of all households now rent, and more than 60% of all rental housing (totaling 30 million households) is in the multifamily sector
- 24% of U.S. renter households (about 20 million) now spend more than half of their annual income on housing
- Efficiency measures are far less likely to be installed in multifamily rentals than in any other type of housing (due to split incentives)
- Studies estimate that energy efficiency could cut the multifamily affordable housing sector's electricity usage by as much as 26%

Energy efficiency and renewable energy upgrades serve as an effective strategy to slow these trends and preserve affordability.



### U.S. Federal Programs Focused on Energy Efficient and Affordable Housing

#### **Internal Revenue Service (IRS)**

- Low-Income Housing Tax Credit (LIHTC) - Providing about **\$9.5 billion** annually in tax credits for affordable new construction and comprehensive rehabs.



- State Qualified Allocation Plans (QAPs) have strong energy and sustainability requirements.

#### **Department of Health and Human Services (HHS)**

- Low Income Home Energy Assistance Program (LIHEAP) – Providing about **\$3.35 billion** annually to help low-income families pay for things like home energy bills and energy crises, includes paying for certain weatherization upgrades.



#### **Department of Energy (DOE)**

- Weatherization Assistance Program assists elderly & low-income owners weatherize homes.
- Multifamily Better Buildings Challenge with HUD recognizes market leaders.

#### **Department of Housing and Urban Development (HUD)**

- Preserves & expands affordable housing in the U.S. through financing and rental assistance that supports climate resilience and energy efficiency

#### **Environmental Protection Agency (EPA)**

- Affordable housing is a significant share of ENERGY STAR residential new construction certifications; manages ENERGY STAR for new homes program, both single and multi-family.









#### **Better Buildings Multifamily Sector**

Market barriers include:

Multiple split incentives -- Regulatory barriers to financing for subsidized affordable housing -- Difficulty collecting utility data --- Challenges retaining trained workers

- Through Better Buildings, DOE and HUD challenge market leaders, recognize success & innovation; provide technical assistance and peer exchange opportunities
- Partners commit to reducing energy usage by at least 20% within 10 years and sharing their proven approached (can also set a water goal)
- To date, 90+ Multifamily Better Buildings Challenge Partners
- 700,000+ Housing Units, nearly 80% assisted or public housing
- Since 2013: 21 trillion cumulative BTUs saved and \$200 million cumulative savings



#### **Partners Leading the Way**

## 5 Habits of Successful Affordable Housing Partners:

- 1. Set a public goal
- 2. Manage/understand data (utility benchmarking)
- 3. Innovative partnerships (inside and out) to drive solutions
- 4. It takes a team
- 5. Continued effort

#### Better Buildings Solution Center:

- 70 multifamily Showcase Projects showing 20% energy reduction in individual buildings
- 40+ Implementation Models detailing proven strategies for overcoming multifamily barriers
- 5 multifamily toolkits and 50+ multifamily webinar presentations

#### **Examples of Partners Showcasing Innovation:**

#### **Jonathan Rose Companies**

- \$525 million impact acquisition fund (2020) focused on climate change, poverty and income inequality, and COVID health concerns
- Secures government backed financing developers and owners need to create/preserve multifamily communities countrywide

#### **Stewards of Affordable Housing for the Future (SAHF)**

- Collaborative of 13 nonprofit affordable housing providers with 149,000+ multifamily rental homes; part of inaugural Better Buildings multifamily cohort
- Shared ownership objectives: Creation and preservation of healthy, sustainable affordable rental homes that foster equity, opportunity, and wellness for people of limited economic resources







## PANEL DISCUSSION



**Tanya Hristova** 

Mayor of Gabrovo







# PANEL DISCUSSION

Q&A







# **CLOSING REMARKS**



### **Karel Vanderpoorten**

Policy Officer Social Economy,
Directorate-General for Internal
Market, Industry, Entrepreneurship
and SMEs, European Commission







# CONCLUSIONS & NEXT STEPS

### Oliver Rapf, Executive Director, BPIE











Stay tuned for our upcoming webinar: Attracting finance for energy-efficiency in buildings

- 20 October 2021

www.bpie.eu

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