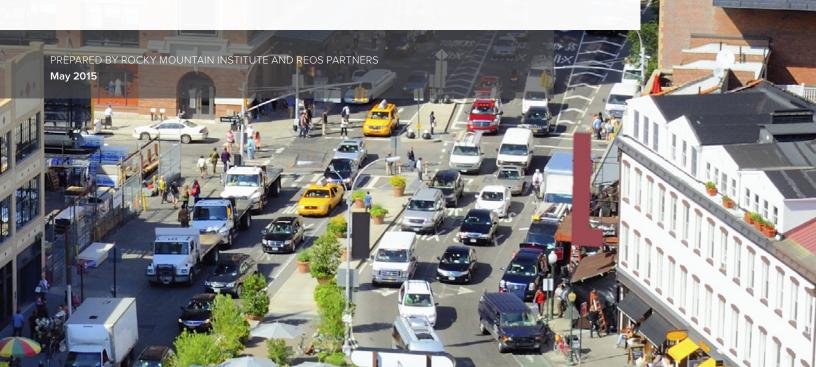


VOICES ON ENERGY ISSUES IN LOW-INCOME COMMUNITIES

A SYNTHESIS OF INTERVIEWS WITH NEW YORK STAKEHOLDERS

e-Lab Leap Initiative

Empowering and improving the lives of low-income households and communities in a clean energy future



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Association for Energy Affordability, Inc.

Bright Power, Inc.

Bronx Cooperative Development Initiative

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Green City Force

Green Long Island, Inc.

Lott Community Development Corporation

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New York City Environmental Justice Alliance

New York Power Authority

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New York State Energy Research and Development Authority

NY Green Bank

Office of the Governor of New York State

Pace Energy and Climate Center

Solix, Inc.

The New York Community Trust

U.S. Department of Housing & Urban Development



e-Lab is a multi-year, multi-stakeholder forum to address complex electricity system challenges no individual stakeholder can solve alone. e-Lab supports practical innovation across traditional institutional boundaries to overcome barriers to the economic deployment of distributed energy resources in the U.S. electricity sector. e-Lab participants convene and collaborate on solutions and engage in on-the-ground projects that address the biggest challenges facing the sector: new business, pricing, and regulatory models; grid security; customer engagement; and grid integration of low-carbon renewable energy. These changes are critical steps towards a more resilient, affordable, and sustainable electricity system.

Please visit http://www.rmi.org/eLab for more information.



Since 1982, Rocky Mountain Institute has advanced market-based solutions that transform global energy use to create a clean, prosperous, and secure future. An independent, nonprofit think-and-do tank, RMI engages with businesses, communities, and institutions to accelerate and scale replicable solutions that drive the cost-effective shift from fossil fuels to efficiency and renewables.

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SOCIAL LAB DESCRIPTION

As an e-Lab initiative, e-Lab Leap takes the form of a "change lab"—a proven method to catalyze change by creating an ongoing space or platform to foster innovation, learning, leadership, and capacity development. The methodology is designed to facilitate and support meaningful change. Key pillars of a change lab include:

- Working with a committed and diverse range of stakeholders who represent a microcosm of the system that needs to change. Focus is given to inviting unlikely allies to the table as well as the more obvious groups with a stake in the issue.
- Using a cutting-edge group process that works across all levels of the system and recognizes that change needs to occur at the individual, team, and system levels.
- Developing a shared understanding across the stakeholder group of both the current situation and the opportunities to shift and improve the system.
- Empowering key actors to innovate, collaborate, and lead change by supporting them to continue to work together and learn in order to develop solutions.

LIST OF ACRONYMS

AMI – Advanced Metering Infrastructure

CDC – Community Development Corporation

CHP - Combined Heat and Power

CUAC - California Utility Allowance Calculator

DER – Distributed Energy Resources

DPS – Department of Public Service

ESCO – Energy Service Company

 ${\sf HCR-Homes}$ and Community Renewal

HEAP – Home Energy Assistance Program

HUD - Housing and Urban Development

 $\mathsf{MPP}-\mathsf{Multifamily}\ \mathsf{Performance}\ \mathsf{Program}$

NYCHA – New York City Housing Authority

NYSERDA – New York State Energy Research and Development Authority

NYISO – New York Independent System Operator

LEED – Leadership in Energy & Environmental Design

LIHTC – Low-Income Housing Tax Credit

 ${\sf PSC-Public\ Service\ Commission}$

 $\ensuremath{\mathsf{REV}} - \ensuremath{\mathsf{Reforming}}$ the Energy Vision

TRC – Total Resource Cost

 ${\sf WAP-Weatherization\ Assistance\ Program}$





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PREFACE:

THE START OF A CONVERSATION

The e⁻Lab Leap initiative focuses on how to develop solutions that empower and improve the lives of low-income households and communities in a clean energy future.

Our first step towards this goal is to convene stakeholders—those working to empower and improve the lives of those in New York state's low-income communities and households through their relationships with energy—for a two-day workshop with the intention of launching a change lab. To prepare for this workshop, Rocky Mountain Institute and Reos Partners, through e-Lab Leap, conducted dialogue interviews with more than 30 stakeholders representing a wide range of perspectives including utilities, regulators, affordable housing managers, environmental advocates, social justice advocates, energy service providers, communitybased organizations, state and federal government entities, financiers, foundations, and consumer advocates in March and April 2015 to investigate the viewpoints, thoughts, feelings, and relationships of those working in this space.

This document synthesizes these perspectives as a series of unattributed quotes from the dialogue interviews. While these quotes are the opinions of individual stakeholders, together they begin to outline low-income communities' and households' relationships with energy, and the efforts currently underway to improve them. The views presented are by no means exhaustive of the opinions of stakeholders working within this field. Rather, this is a starting point for those working with and for low-income communities

and households to understand the multifarious and complex views of stakeholders concerning New York state's energy system.

While interviewees were from a broad range of backgrounds and experiences, we found these interviews formed a prevailing narrative. To summarize, the challenges (and opportunities) of tackling energy issues in low-income communities and households are large and complex. In facing these challenges, stakeholders have learned important lessons and faced significant barriers. A quickly changing landscape has created uncertainty, but also the opportunity for innovation. Given strong efforts in the past and optimism for the future, the challenges are conquerable. As such, we grouped the quotes within the framework of this narrative. We stress, however, that the narrative is but one way to make sense of the statements and viewpoints. Although we feel it accurately represents what we heard, readers should recognize there are other ways to represent the story as well.

As you read this collection of quotes, please read without bias, but with the intention of learning and understanding all the different views present within the document. Note what strikes or upsets you, or views that are different from your own perspective. Think too, of how the perceptions embodied in these quotes shape the reality of the work in this field.

While some editing has been done to ensure conciseness and clarity, the editors have worked diligently to preserve the meaning of each quote. In some cases, specific names of organizations, programs, or people were removed to preserve anonymity.









THE CHALLENGES (AND OPPORTUNITIES) ARE LARGE AND COMPLEX

AFFORDABILITY AND ACCESS IS AN ISSUE FOR MANY

"750,000 customers in New York state are in arrears, yielding \$1 billion in arrears. The numbers are big; last year, utilities terminated service for 275,000. When the fall season arrives and the cold weather is close, how do we really know whose safety is threatened?"

"170,000 of Con Edison's customers, 10 percent, were in arrears and are on an installment plan to bring their account to \$0. 400,000 customers are receiving the low-income rate."

"Well, let me explain to you what the root cause of the problem is: Millions of people don't have enough money. Twenty percent of New York is low income. On one level that's really simple, and on the levels beneath that it's a really big challenge."

"While I support assistance for low-income customers, (affordability) is an overarching problem for all New York consumers. I don't think anyone is finding their utility rates affordable."



THE PROBLEM IS MORE THAN JUST ENERGY

"It (low-income and energy) goes well beyond the energy world into the housing world, into the community development world, into the financing world. For me it is one of the most community-based issues in the energy sphere because it touches on all of these things. In addition, it reveals that there are a number of solutions, a number of actions you can pursue because it does touch on so many sectors."

"Energy burden reduction is another form of poverty alleviation. The energy side of things has been under-examined, under-explored, as a poverty alleviation measure."

"Even within the microcosm of New York City, there are incredibly complex regional issues. Long Island has the need, interesting demographics, and fuel issues, and is the most expensive place to live in the country."

"We face significant cultural, language, and geographic diversity. There is also significant variation across the state in the low-income customer profile (homeowner vs. renter, single family vs. multifamily, etc.)."

"(Affordable housing) happens in a real estate product market. For example, if you can't get reliable low-flush toilets, you can't get them whether you are trying to put them in a commercial building or whether you are trying to put them in affordable housing. There is a bigger state of the market, particularly when it comes to things that have to arrive at your job site ready made."







THE CHALLENGES (AND OPPORTUNITIES)

ARE LARGE AND COMPLEX

"Reliability issues in multifamily housing are tremendous. Vertical cities bring different challenges when it comes to resiliency. When Sandy happened, elevators and water pumps weren't working. These are things that people had not thought about before."

"The state's electric grid is older than the state itself. It is one of the major challenges in New York state that contributes to a lot; not just energy affordability, but many of the energy challenges we have. In particular, when you get to the downstate area, many transmission bottlenecks not only affect increased rates, but also reliability. We have a lot of aging power plants that are certainly not as efficient as they could be, that we just keep running, or upgrading."

SUCCESS IS HARD TO DEFINE

"What impact do we really get from putting more money into the system? Does going from \$10–15 a month in energy savings to \$20 really make that much of a difference? Focusing on energy doesn't help answer the bigger question, which is how to help everyone earn a living wage."

"For most people, energy consumption is not something to think about until you get the bill, and then it's apparent. If you think about it from the perspective of what a low-to-moderate-income person is most interested in, they may not think about energy, but everyone cares about dollars and cents. If you put things in that context, you will get motivated individuals. Even if an electricity customer's bill is low, if you create an opportunity to save \$5, the perspective changes to 'Oh, what do I need to do?' That's worth their time, that's already changing the dialogue."

"In New York City, in the downstate market, we heat with fuel. We don't have electric heating. We don't have electric hot water. When it comes to electricity-related cost burden, it really comes to in-unit electrical use for those residents in the multifamily building. It is a difficult proposition, in some ways, to look at it through a unit-by-unit basis. On one hand, \$10 a month is real money, but on the other hand, it is hard to get strong feelings about it when it is small amounts of money, even from a resident's perspective."

"It's not an issue of, 'I'm going to be \$20 over (budget) this month, so energy is a place that I can (save).' It's choosing between food and rent. That's how people view the issue, reducing their individual energy consumption feels really small."

"Even if you significantly reduce a building's energy consumption, the dollar value of the energy savings is relatively small for most buildings. What do the energy savings represent as a proportion of total operating expenditures for the building? Given that the dollar values are so small, how do you motivate people?"

THE PROBLEM IS NOT NEW

"I've been working with people who have been fighting for a low-income electricity rate for nearly 25 years. Or wait...has it been 30 years now? Wow. I forget how long it has been."

"Many of the current leaders in this space grew up in the affordable housing movement in the '70s, '80s, and '90s."







THE CHALLENGES (AND OPPORTUNITIES)

ARE LARGE AND COMPLEX

AFFECTING CHANGE IS HARD...AND COMPLICATED

"We are asking some people to function against their own self interests, to come to the table with us and figure a way for them to do something unimaginable. We are asking them to do something they can rightfully fear will put them out of business. We need to recognize that hurdle."

"I've spent a lot of my time trying to make electricity more expensive because I've wanted to put the external costs of the environmental damage into the costs of electricity. So I haven't been very successful at also making energy more affordable."

"No one had a vision for (my community) and where it could go from an economic development perspective. No one. We weren't just lacking good ideas, but any ideas."

CHARACTERIZING THE STAKEHOLDERS IS DIFFICULT

"If you only define the problem as 'low income,' you're missing environmental justice where both race and income are relevant. There are certainly low-income communities that aren't communities of color, but many of them will be. At the same time, many of the consumer advocates are almost all white."

"We need better information on the demographics of low-income customers and what are the drivers. Then we can start making appropriate decisions about what we should be doing. Because in some situations, these people are in a very unfortunate place due to circumstances outside their control, but other times they are in this place due to their own decisions."

"So what is the appropriate threshold for low income? By default, New York has always looked to the federal requirements for HEAP—60 percent of median income. Also, New York looks at the federal definition of 150 percent above the poverty line. Moderate income is much harder to define. NYSERDA has connected moderate income to HUD's definition of 80 percent of median income or below."











THERE HAVE BEEN IMPORTANT LESSONS LEARNED

RELATE TO COMMUNITY INTERESTS

"I was talking about energy efficiency for a presentation, and someone came up to me afterwards and said, 'This energy efficiency thing sounds like a fairy tale.' And you have to confront this. Many people still see energy efficiency as a fairy tale—that's a factor, that's a heavy thing you've got to lift. Efficiency is just not tangible to many people."

"When you talk about technical topics, such as the benefits of microgrids, messaging is a concern. Communities just hear 'the neighborhood is getting disconnected from the grid.' There is a lot of translation and basic energy education that needs to take place. It is difficult to explain a very technical topic and message it correctly."

"I learned early in my career that we shouldn't bring preconceptions of what we think is right for the neighborhood."

SEND THE RIGHT MESSENGER

"Who the messenger is can be huge. Bad messaging can kill a really good program. Who's doing the engaging in community engagement programs? A lot of times it's not someone from the community. You need to have people from the communities doing this work, together with whoever is running the program. The South Bronx is not Red Hook. You have to understand the different dynamics of the different communities. Bronx was not hit by Sandy like the South Bronx was."

"In low-income communities, the sense of distrust can be high and the dynamics are hyper-local: 'If you're not from this building...' 'If you're not from my neighborhood...' A trusted, credible messenger is vital."

"If you're going to get down to the community level, you need honest brokers. Clearly, it's not going to be NYCHA. Probably isn't going to be local politicians. That's why the community-based organizations are so important. Because unless you're going to go into every house and replace every refrigerator by mandate, you're going to need community buy-in."

"Everybody has the question, 'How do we reach local communities?' It may not be building a network, but tapping into an existing network."

"We went to small businesses first, which are strong connections to the community. This allowed us to disarm local politics a bit, as businesses are critical to the social fabric. It is a less emotional conversation, more of a business conversation with businesses. Local businesses have established trust and communication methods with the community."

"We've designed our program to ensure success by starting with DERs for houses of worship first and then letting them become the champions and trusted community leaders who will help the program expand to households."

THERE IS A ROLE FOR THE MARKET

"Really, it comes down to dollars and cents. Economics are what will motivate people to act."

"Increasing access to clean energy really should be about creating markets, not creating new mandates."





THERE HAVE BEEN IMPORTANT LESSONS LEARNED

"You need to make sure to get some private landlords in the conversation that are not mission driven, but business oriented."

"Research shows it costs around \$1,000 to give services away, for free, when the government is running a program. Needless to say, there's room for improvement. NYSERDA's EmPower program allows contractors to do their own outreach. There's something about that profit motive that increases efficiency. So why not engage the contractor in the process?"

THERE IS A ROLE FOR GOVERNMENT

"Government can be an agent of change. Government can be the convener and an experimenter and investor. Sure, government can over-regulate, but there's been plenty of success when you put realistic regulations in place that require buildings to operate in certain ways. Once people start to do something then it becomes a whole lot easier to make things scale."

"Markets are by no means perfect. There are market failures that we have to address."

"There is a predisposition of economists to not like subsidy programs because they inherently distort the market and are therefore bad, a Milton Friedman 'love affair,' if you will. Taking 25 percent of NYSERDA resources to capitalize the Green Bank is a case of ideology trumping practical procedure. The rapidity and magnitude of this change has undermined current successful NYSERDA programs and has caused a lot of pain. It should have been more like 5 percent for a pilot project, a proof of concept to work out the kinks, and then scale from there."

"The EmPower program (NYSERDA) is now a pretty good program. It was a big fight to fund it. Basically, the utilities wouldn't play at first. Now they are, five

years later, and it's helping tens of thousands of homes save money on their energy bills."

"In (energy efficiency and weatherization) programs, you have quality control and monitoring. In markets, it is 'buyer-beware.' The buyer-beware mentality hurts a lot of folks. Let government be committed to continue the programs and support the best, while exploring transition."

"We laud the success of the NYSERDA Multifamily Performance Program, which has been quite successful; it has had up to an 80 percent (achievement) rate of predicted savings, which is pretty amazing. We think one reason (for this success) is they require an energy-efficiency-focused partner to be a part of the process from audit to design through implementation."

"If energy efficiency does make things more affordable, and it's in the interest of all owners of public housing to do it, then why shouldn't we attach it to subsidies?"

"There will always be a disadvantaged community that needs help from the government. The upper and middle class may not need help from the government, financing from the Green Bank, or subsidies. But there's an element of subsidy in a monetary form that we are going to need to provide that is going to help people put food on the table."

"Market-based solutions and green banks are ridiculous solutions. Mandates, especially building codes, are a much better approach for encouraging energy savings and reduced utility bills."

"One thing we have to remember with affordable housing organizations is that there are never enough man-hours in a day to do everything that they want, at the level they would like to. In order for you to get something done, you have to figure out a way





to elevate it within the list of priorities. If you are getting a \$1.5 million subsidy, then it moves (energy efficiency) up."

"New York state leadership has been very clear on the idea that the state of New York should be in the position of helping lend money to get this work done for anyone who can afford it. This assertion has been made without recognizing that this means a heavily regulatory role, which none of the agencies involved have a good history in, or a clear and compelling argument why the low-income bracket is better served this way than by direct government services."

CONSIDER CONSUMER BEHAVIOR

"Almost everybody runs an air conditioner during the summer. If (multifamily residents) have a more efficient building, they are going to see savings in the summer; kilowatt-hours are not cheap. I don't think they are thinking about it. The average renter is not making the connection between energy efficiency and doing things in their unit that can help them save on their bill."

"The issues that we have with carbon and electricity are all about humans, not only the electricity system. It's about our engagement and relation to our human needs and how we fulfill them, and so the idea that the customer is a different kind of partner is huge, and just as big as any technology...but a lot of the policy wonks have not taken that piece as seriously."

"In New York City, you have centralized boilers, so residents don't pay for heat. They don't have a huge incentive as customers to conserve when it comes to heat, because they don't get the bill."







THERE HAVE BEEN IMPORTANT LESSONS LEARNED

MOMENTUM IS IMPORTANT

"Success in energy efficiency programs is all about building and sustaining momentum. The people involved refer others, and are key to scaling and propelling the program. The uncertainty of REV will stall momentum and we'll lose a lot. Businesses might redeploy resources elsewhere. More carefully planned transitions need to be in place beyond rolling back current programs."

"New York policymakers have to stop saying, 'No more incentives, no more programs.' This damages the market by introducing uncertainty. Incentives and programs have spurred market transformation and are a critical component of future success."

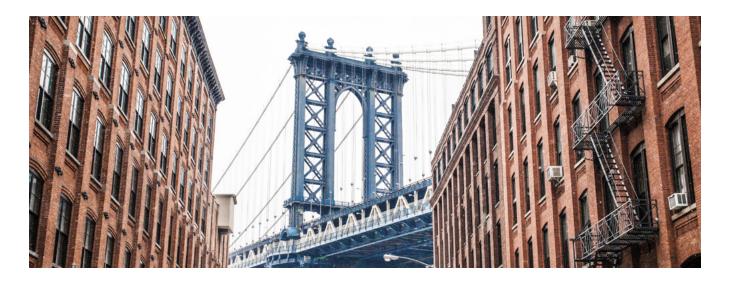
KEEP THE LONG-TERM IN MIND

"Renewables will, in the long run, make everything much more affordable, or at least that is how it should work. There are all these opportunities for partnership, but I think everybody is too focused on the immediate. I will admit that on the consumer side, it is costly to invest in these technologies. It is costly to change the state's energy system. It is much easier

to look at the immediate threat of your utility company trying to raise your rates, rather than thinking of ways to mitigate that high cost and rethink the system from the beginning. It will certainly be something to see how the REV case unfolds, and how it impacts affordability. It is a difficult situation to be in; were we to work together things would be much better in the long run, but the demand is for something much more immediate."

"Long-term partnerships are key. Injecting money into energy projects is really important; (in the context of REV) we would be worried to see some of that incentive money on the low-income side and retro-aid side disappear in a flash. But we do see that (money) is not enough. No matter how much money you pump into projects, it is actually not going to work unless there is some kind of long-term engagement and support, especially on the low-income side but really for everybody."

"In our work, to make meaningful change, you need to work with others to develop a long-term vision and then develop leadership capacity to make sure there are people who can carry out that vision."











TURF WARS AND LACK OF COOPERATION

"You wouldn't think that low-to-moderate-income and energy would be such a controversial issue, but it is. Everyone wants to do this, it is a priority in the energy sector, then you get to the granular level, and things aren't as simple as they seem. Energy affordability vs. energy efficiency, for example; what are you doing to reduce customer energy bills now, on one hand, and drive efficiency and DER in low-income homes? Sometimes there are trade-offs."

"Folks have designed and run programs at many of these agencies for a long time and feel ownership as these programs have developed. They see them as their own programs. And it seems like that's the case in almost all the agencies."

"I want New York to overcome the turf issues between agencies and departments. Yes, the statutory requirements must be upheld, but otherwise, why can't these groups work together more? Are there creative ways that they could partner?"

"State agencies have particular structures and institutional cultures that change over time, but they are not necessarily responsive to policy recommendations and political pressure. One of the serious concerns and low points has been pushing against silos in state agencies. I'm fairly convinced, whatever the PSC orders, that will not be the way DPS and NYSERDA implement, because as long as the budget is cut into segments and staff is in segments, those segments will be how things are implemented."

"There seems to be a huge schism between the groups that are pushing for renewables, and the groups that are pushing for affordability. I suppose I can understand why, but in my mind they go together so easily, where by working together they can accomplish the same end goals."

LIMITED FUNDING

"How do you prioritize? Are we going to dedicate money to buying down bills or are we going to dedicate resources to efficiency and expanding access to solar?"

"You'll have advocates wanting to raise the moderate income definition and recommending taking the definition all the way up to 100 percent of median income. All these people would be eligible for at least some level of assistance but that would mean you're going to have to start dealing with trade-offs of limited resources."

"Even if the economics are good, affordable housing just doesn't have the money, financing, or program access for energy efficiency and weatherization."

"It is not as if affordable housing gets a pot of money and can do whatever they want with it. There is a lot of red tape; there are a lot of cooks in the kitchen in terms of how they can fund certain projects. Say for example that they have enough money in their operating account to put solar panels on their roof. They can't just pay for solar panels. It is not that simple; they don't have full authority or jurisdiction over their expenditures."

"Poor use of government funds in the past, especially on Medicare and Medicaid, has led to greater government oversight. While the aims of that oversight are well intended, it has meant increased bureaucracy to ensure it works. And that has made every program more expensive to run. That's a big challenge when program budgets are limited."

"A lot of solutions for reducing energy are straightforward (switching out air conditioners, using daylight harvesting, etc.), it is just about having the resources to deploy them."







INEFFECTIVE POLICY

"Too often, politics trump policy. On customer advocacy, we see a lot of protections for seniors, even when they're not the most vulnerable. For instance, just recently, there was a new bill being debated to give seniors energy subsidies for incomes up to "\$150,000. There are many seniors in need, but are seniors earning close to \$150,000 the most in need of energy subsidies while there are families going without heat in the winter to save money?"

"My experience has highlighted the importance of the ability to have public dialogue that is actionable. There is a lack of vocabulary to relate individual projects to overall city policy goals on climate change. Labels like LEED or green roofs are just proxies for performance. If you want to get to carbon goals, you need to get to actual performance."

"A broken window, is that maintenance or thermal integrity? Does it depend on how long the window has been broken?"

"I don't know why weatherization is not catered to the life cycle of the low-income housing finance life cycle (LIHTC, Year 15, etc.), especially since weatherization serves exclusively low-income customers."

"One obstacle, maybe the biggest one (to energy opportunities in the affordable housing space), subsidized housing has specific rules on how they spend money. We need to allow specific types of energy services as allowable expenses for subsidized housing. It is not only that they don't have money; it is how they are allowed to spend money. In effect, subsidized housing hasn't been given permission to support energy projects."

"The State has said that over the next ten years we're going to cut ratepayer programs in half, and that puts

downward pressure on available funding to do this energy efficiency work. The thinking is that they'd like to maintain the same proportion of funds between customer segments. But that's a concern if you say that the low-income customers will have the same portion of funds, but with a 50 percent cut to them."

"We need to inventory what we have, inventory where we want to go, and what are the objectives. If we can't explain why the government is in a certain business, then we probably shouldn't be there. If the answer is, 'Well, we've always had that program,' that's not a good answer. Having these conversations is a sign of hope that we're getting somewhere that's impactful."

"Sometimes, from a customer advocacy perspective, we don't look at all the bad decisions happening at NYISO that are leading to unneeded costs, raising customer bills. Energy affordability is focused on retail, but there are a lot of reasons why New York's rates are so high."

INEFFECTIVE GOVERNMENT PROGRAMS

"Low-income programs are usually way behind commercial/industrial programs. Money is getting rolled over year-to-year unspent; the program is not hitting its goals. The root cause? Very specific program models with very specific measurements; there is almost too much attention to detail. This really hindered changes or edits to program language. It created a tiny box that nothing fits in to. It was poor execution of program design; very narrow specification on what a contractor has to deliver. It seemed they never really wanted these programs to succeed."

"A lot of failures have really been a function of poor execution of programs as opposed to poor intention, funding, or even design. For example, the NYSERDA MPP program, not so great. Maybe they were too busy with other things, had the wrong priorities, or lacked vision and desire to reach their goals. It is







almost as if they are trying hard not to give away money. The bureaucracy was heinous."

"There are token programs not trying to really lower the energy burden on low-income customers. They are much more focused on resource acquisition, so their attention is on the large customers. The exception is weatherization."

"Some of the organizations in New York that provide the most help to low-income customers are also limited in how they can provide support. For instance, NYSERDA or DPS looks to address these challenges with ratepayer dollars, but there are limitations for how that money can be used."

"No one could tell me how to navigate all the available incentives for energy efficiency and weatherization. I am an energy professional; I couldn't figure out how to do it to the point I gave up."

"Multifamily is still a big challenge for NYSERDA and WAP. There are several reasons for that. First, any intrusive measures, at least for NYSERDA's program, need landlord sign-off. When NYSERDA started their multifamily program, they tried to require a landlord contribution of 25 percent. But it was hard to get landlords to agree to that requirement so they ended up waiving the requirement. Landlords, meanwhile, are afraid of someone working on behalf of the government coming into their homes. They're afraid someone will notice a code violation and report back to other government entities. The housing stock, in a lot of cases, is older and structurally challenged. So NYSERDA and others are either going to have to entice the landlords to do something or mandate them to do something."

"One of the big problems you have in New York is the weatherization infrastructure; it is not very good in terms of the clarity and quality of information they

provide. The owner-match requirement, for example, is unclear, and is very prohibitive for building owners to commit to projects. You really are asking a building owner to sign up and pay for something when they are truly not sure what they are going to do. With single-family weatherization, the owner of the property doesn't pay a dime. If you agree to go for it, whatever you get you get, but you haven't paid for it so it is hard to complain. With multifamily, the owner-match requirement is a game changer; the psychology of the building owner has not been accounted for in the program design. If they are going to put skin in the game, they have to know what they are getting in return."

TOO MANY ONE-OFF PILOT PROJECTS

"Current efforts in New York have been done in a very piecemeal way. Generally, that's what NYCHA is famous for—doing a lot of pilots in a very piecemeal way. It's like, 'Let's look at the Red Hook housing and do urban farming.' So there are a lot of pilots, but I'm not sure we've seen a real policy. That may be shifting. NYCHA is looking to pull together this next generation plan, and I know energy efficiency is going to be a big part of that. There's nobody who doesn't want to retrofit or renovate NYCHA's housing, but the costs are overwhelming."

"New York City has tens of thousands of buildings. One-off projects are not sufficient for meeting the city's efficiency and climate goals."

"The private sector is really interested in broadband for low income, which is on a similar track as energy. Everyone is doing pilots. People love the attention. Google, for instance, will do broadband in Austin for public housing. But is that replicable and what does that mean over time? Private sector commitment to working low-income energy issues is a big question for what will happen over time."







SPLIT INCENTIVES

"There should be some incentive, where the cost is not placed on tenants, for landlords to be more energy efficient. My assumption is that is where most of the energy consumption is coming from, building-wide things and not the individual tenant. I know people, myself included, who open windows in the middle of winter because the heat is so high. But it's such a fight to get the landlord to turn the heat on, I'm sure as hell not going to tell him to turn it down, because he will just turn it off. That's where the issue is: in consumption, in fixing the landlords."

"We use so much less fuel now than we did before, but the indexes that are used to calculate rent have not been changed to reflect that, so landlords are able to double dip, by charging more for rent after doing capital improvements, and then not passing on the savings from energy bills."

"What is the best way of delivering the benefits of renewable energy and energy efficiency to multifamily building residents? If you are really thinking about the benefits of the system in terms of reducing demand, and if you are thinking about carbon, why would you give less expensive energy to people that are going to run their air conditioner all summer with windows open?"

"The split incentives issue really comes down to behavior. There is building operator behavior, and there is resident behavior, and the communication loops between the two are not working."

"Many low-income communities tend to live in dilapidated housing with landlords who are not interested in energy efficiency. At the same time, these communities are politically and environmentally aware and have built a lot of institutions. It cuts both ways. There are both tremendous challenges and tremendous opportunities in these communities."

GAPS IN ENERGY LITERACY

"We started to get managers and developers to be engaged, but there's a big next step if we're looking to engage residents. We have a long way to go for public housing. It's really hard. It's a little better in private housing, because the residents are metered and it's easier to engage them and put responsibility on them. In public housing, there's no real accountability and little education about energy, and we're not taking those challenges on in a meaningful way."

"We have to do a little bit more work on educating our stakeholders as to how the utility bill breaks down. People don't really understand the difference between a supply charge and a delivery charge, or the various components that go into their bill."

ENERGY AS ONE CONCERN AMONG MANY

"People are much more concerned about quality issues. They don't want to hear noises, they don't want bad smells, they don't want pests, they don't want mold and moisture issues. These are the things that really get people riled up. The electric bill? Not so much."

"What if you go to a community and say, 'How can we help you implement energy efficiency in your buildings?' Most likely, you will hear, 'I'm worried about street crime, drug trafficking, the elevators!' Ok, how do you sell a community on the benefits of energy efficiency measures when they don't connect with their priority needs at all?"

"When you're thinking about putting food on the table, you're not thinking about what are my energy options. You're not saying, 'Oh, I could get wind energy as part of my supply mix.' So there's an





equality issue that transcends the dollars and cents. It's about mindshare and educating consumers and an educational gap that transcends employment."

"Low and fixed income are just able to get their utility bill, understand that they are paying too much money, and know that they really can't afford it. They are making decisions between eating and keeping their lights on or their heat on or taking their medication."

INEQUALITY AND DISCRIMINATION

"It's awful to say, but many of the building trade unions have historically been terrible on discrimination. Racism still plagues some of these organizations."

"DER deployment intrinsically makes the people left behind far more dependent on things like traditional infrastructure. This is almost a different kind of lack of infrastructure investment. The one thing low-income communities always complain about is 'Upper Manhattan will get that first, while we get blackouts because you didn't invest in us.' You fast-forward this scenario, DER is an opportunity for people to invest in themselves, separate from the grid, but low-income communities don't have these opportunities. Then another Sandy happens, and they are the same groups that are affected."

"There is this issue that historically, low-income customers pay into the systems benefit charge, and yet they are unable to take advantage of the various incentives that the state funds through that charge."

"Clean energy is a rich man's disease. I don't want to say it like that because clean energy is a wonderful thing, but if its not accessible to everyone, that's a problem. I'm an 'equality to opportunity' person. Not like an 'everyone should get all the same things' person, but if there's an opportunity, everyone should have the same resources to take advantage of it if they want to."

LIMITED PARTICIPATION IN THE POLITICAL PROCESS

"There is a lack of transparency. The conversation is wrapped in engineering language that is completely meant to wall off people and keep the conversation among 'experts,' and the economics are designed to not engage but to keep exclusive. Also, for the densest city in the U.S., the regulatory process is being driven out of Albany. It should be happening much more frequently and much more openly in New York City."

"The Public Service Commission meets in Albany. You can access it by webcast, but they meet in Albany, during the workday. A lot of the documents that are put forth in those proceedings are not something that every man can read through very easily. Overall it is very difficult for consumers to get involved. Everybody knows that they are paying too much, but nobody really knows why, most people don't understand what is on their utility bill. It is an issue that spans across all income brackets."

"The notion that we are going to have a transition to a clean energy economy without major public support is incorrect. We had to have significant public support to build the grid in the first place, or to accomplish essentially any other broad policy objective. In the REV process, we are not cultivating public support, developing a future in line with what the public wants."

"In either legislation or in regulation, the work on low income is only really considered and done in the 11th hour, it's something that is done at the last minute, rather than on the merit of need."

"Democratizing policy is still such a challenge. We're in 2015 and we have not yet broken through to a place where an agenda that is really about







serving the public interest is actually what we are approximating. We're going in the opposite direction, despite advances in technologies, election of progressive officials, etc. The tide is still rolling in the wrong direction."

"The REV proceeding lacks a meaningful community participation track. The process has been going really fast. The speed and timing of the REV process has been structurally designed to not include grassroots comments. The comment process, for example, occurred during Climate Week, which compromised the process by making it difficult for the environmental community to participate. This is not allowing for communities to cocreate solutions."

LACK OF REPRESENTATION

"The major utility issue we face is not having an independent consumer advocate to represent residential utility consumers. We are unique in the

regard that our utility rates, when you look at the price per kWh, tend to be higher than the national average. In most instances, when we look at the data, we are usually second in the entire country for the price per kWh. Not only are our rates higher, but there are 40 other states, and the District of Columbia, that have this type of advocate in place that New York does not. We have been able to see, through the budget documents of these states that have such advocates, that it is really a large return on investment for the consumer."

"In commercial projects, people are well represented, there is an engaged customer base. You have facilitators; they will translate information and communicate it to businesses. You have well-established communication channels. On the low-income side, communication is organic, nebulous, and very local...who is the messenger, who is the voice?"









PREVAILING LACK OF TRUST

"Trust is another big issue. People don't naturally believe that something is free and not a scam. Language is a barrier to building that trust. In the city in particular, many people don't speak English. There are probably over 100 different languages spoken in New York City."

"Trust issues are real, and scams are frequent. Living in a tough town generates a lot of mistrust. You have to find the trusted community representatives."

"Trust is an issue. There is a mistrust of landlords, for example. There is suspicion that anything done to the building will result in increased rent."

"With regards to affordability and gentrification, when you're pushing forward these big energy efficiency upgrades and saying, 'Let's renew your community, renew your building,' residents will say, 'Great, for who? Certainly not for me. If you really wanted to do this for me, where were you 10–15 years ago when we were asking for these things?"

"I am suspicious of the well-meaning nature of community-based organizations, especially when members do not line up with their audience, their skills and capacity do not line up with what is needed for their mission, and they are paid by the application, not project success."

"The utility's Public Affairs Department isn't really versed in energy policy, but rather versed in quieting the masses. It proves to us the utility doesn't really have a stake in community engagement in an authentic way and doesn't really respect its partnership with community organizations that do a lot of the footwork and legwork. It enforces the conception that grassroots organizations are really just good for outreach and not good for being a part of the legislative process and policy initiatives."

"Who are the right people to partner with? Partners have their own priorities and motivations. Distrust between parties can also exist, so partners need to be chosen carefully."

"At many meetings with government officials, you almost don't need to go. You can practically predict what they will say."









THERE IS UNCERTAINTY IN A QUICKLY CHANGING LANDSCAPE

WHAT ARE THE SPECIFICS OF REV?

"So far, REV is leaving a lot of questions unanswered. We don't know what REV is, what the impact of the Green Bank is. There is a lot of fear in the communities. It is hard to understand and communicate how the system will work. We'd like to be able to answer the questions we are hearing, but we can't. We lack confidence, and we cannot credibly assure our customers that everything will be OK, because we just don't know."

"We need a distillation of the most salient parts of REV; what is relevant to community organizations? They don't have the time or capacity to go through REV. There are organizations that are engaged on these issues, but REV is so complex, so technical, so grey, even experts are struggling with understanding the DSP (distribution system platform) model. We need a series of fact sheets, resources to allow them to provide meaningful comment."

"The PSC has been vague on costs of REV. How much is it really going to cost?"

"How are the new energy service entities in the REV proceedings going to be returning value back to the community in terms of jobs and actual financial benefits?"

"The Commission started the ESCO retail market in New York. They spent hundreds of millions of dollars to subsidize the ESCOs to get it started, and I don't know how they're not going to want to do that again with REV. With the ESCO market now, a large percentage of customers are paying more for their electricity than if they had stayed with their utility. And even a larger percentage of those customers who are paying more are low income. So how will REV be different?"

"What does (a REV future) mean for energy efficiency? We don't want energy efficiency to get lost in all of this discussion of generation."

"From an environmental justice perspective, how is the PSC/DPS going to price local pollution?"

WHAT ARE THE ROLES OF STAKEHOLDERS?

"Are we a social actor or an engineering company?"

"There are entrenched power dynamics and an uneven distribution of power in the energy space. How do we deal with this? The current players look at communities as either clients or problems and not as partners."

"There is a lot of uncertainty with REV, and that can be limiting to action. Our team is pretty educated in what is going on, but even then there are conflicting perspectives, understandings, etc. We have been going through the REV order in detail; it is very complicated. How and where do we fit in, how do we position ourselves, while doing our current work?"

"The real unknown here is how community organizations and low-income communities play in the distributed generation market. That is the big question."

"Short of restructuring entire agencies or hiring new people, I don't know if you can create less siloed agencies without ground up reorganization. Connecticut Green Bank legislation tried to take some of the pieces and make them more rational. I'd like to look at several agencies and say, 'Here are the core programmatic outcomes we want, how do we build an agency that will accomplish that?'"





THERE IS UNCERTAINTY IN A QUICKLY
CHANGING LANDSCAPE

WHAT IS THE EMERGING ROLE OF THE MARKET?

"I'm very dubious of the underlying logic of REV and the Clean Energy Fund, particularly, as it comes to low-income folks. I think market development can be inclusive, but that's not the natural state of the market. The market is about maximizing profits and efficiencies for capital. And when the markets we're developing for DER in New York are developed by people with backgrounds in capital markets, it is almost invariable that the solutions will work for the people lending money and facilitating loans, but the system they're building is primarily concerned with what their peers in capital markets think a program should be, and that will almost invariably not serve low-income people, except in a predatory way. We don't have a way in this country of lending to lowincome communities that is not predatory."

"I'm worried about how we're prioritizing a market approach to energy efficiency and how that may affect low-income customers. Given the size of many low-income customer bills, which are often so small, the total margin for any work is going to be really small, and so there may be little appetite from the private sector to work with low-income customers. It's unclear what a model that can be replicated over thousands of homes looks like."



"Finance markets will not step into the small-housing, multifamily housing markets. This is the threat of REV."

"Where there aren't market-based solutions that readily apply, like low income, government has a role. But with limited resources, the challenge will be, what components of low-income activities can be market based? What is the realm of possibility? Financing could be an opportunity if we look at guaranteed savings. Financing works if there is a revenue stream and the projects are overall net-present value positive."

"How do you make NYSERDA an agent of market transformation after it had mostly moved away from doing that?"

"If a building owner wants to get a mortgage, they'd call a broker, and in less than 24 hours, the broker would call back and say, 'This is the price. This is the interest rate. These are the terms.' So if you were to do a green mortgage program that looks at energy and water savings, where you'd take a bigger loan than you otherwise would due to increased capital spending, it would take more time because it would probably require an audit. So, the building owner is getting all this information in less than 24 hours from traditional brokers for traditional loans, while the green mortgage takes a lot longer. It's tough for the green loan to be competitive."

"Can we learn from experience of access to broadband for low income? Get private industry to sit down and engage with it? Is it replicable? The private sector's commitment is a big question for how deployment of new technologies for low income plays out over time."

"The fundamental question should be if utilities have outgrown their usefulness. REV is trying to be too careful with not hurting utilities. If you are going to go with a free market approach, why not question the fundamental utility business model?"





THERE IS UNCERTAINTY IN A QUICKLY
CHANGING LANDSCAPE

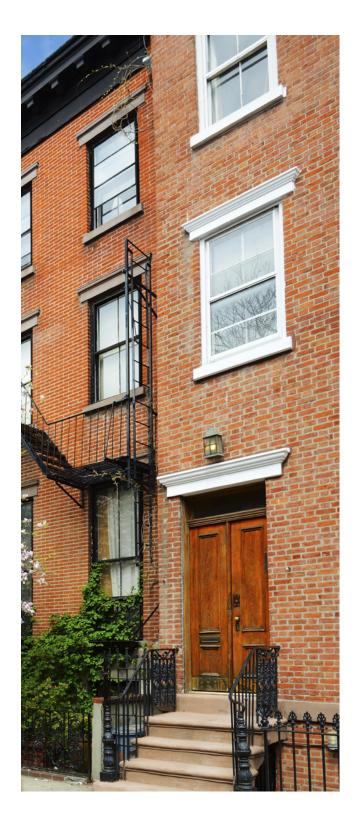
WHAT ARE THE EMERGING IMPACTS OF GENTRIFICATION?

"Energy efficiency and gentrification are overlapping in a way that I don't fully understand. In my building, which is in a neighborhood that is changing, there is a mix of market rate renters and those that are rent controlled. It is not subsidized housing, not affordable housing, but it is in flux. There are tons of buildings in New York in this category where the landlord has a super-strong incentive to push the older low-income tenants out so they can significantly raise the rents. Energy efficiency projects can fall under the major capital improvements law that allows the landlord to raise the rents."

"We have invested a lot into local small businesses. This has been a very effective approach, but how long will these businesses last in the face of gentrification?"

"Is it gentrification or revitalization? People react differently to your choice of terminology. You can offend or engage someone depending on their perspective."

"I was working with a group of older, black women who were in their sixties and seventies who were running a community organization. I was being cautious, telling them that there would be change but we wanted to preserve and protect these local businesses. One of the women after the meeting came up to me and said, 'Honey, I want Starbucks like you have Starbucks. We have enough hair braiding and check cashing places. I want a Starbucks.' So I learned not to bring preconceptions of what I thought the neighborhood needed, but instead to encourage them to go where they wanted to go."









THERE IS UNCERTAINTY IN A QUICKLY
CHANGING LANDSCAPE

WHAT IS THE EMERGING ROLE OF ENERGY TECHNOLOGY?

"I love the community microgrid concept, but we need to figure out where this type of project should go. How do you begin to select the best sites for this type of a project?"

"The more it is about the microgrid, the more it is about the gated community. We worry about change in the utility model structure. Microgrids will raise the base rate, especially for low-income customers."

"The fancy new technologies, the bells and whistles, usually aren't the best investments. I've watched how different developers work. Some just wanted the bells and whistles...what the *New York Times* has been writing about. Then others were more pragmatic, driven by dollars only. Then there are the ones in between. Developers don't just run in one direction. We need to marry the economics with the environmental."

"When it comes to rooftops, there should be a more refined analysis on what rooftop DER makes sense. What DER is best for the community? We can't take a national set of facts and apply them locally. We need different approaches for different areas of the state. No funding is going towards solar thermal, for example, but it can have significant local impact on fossil fuel emissions and environmental health impacts. South Bronx and northern Manhattan have extremely high asthma rates and are in the sweet spot for solar thermal. The current approach to deciding what DER we are going to get behind is ham-handed and suboptimal."

"The low-to-moderate-income sector hasn't really been talking about distributed generation. Generally speaking, in (affordable housing) we have not talked about distributed generation and how it will work for people, except for co-gen."

"One important thing (the affordable housing sector) is thinking about is resiliency. Sandy is still fresh in our mind. When we are thinking about renewable energy, we are not only thinking about it from a carbon perspective, but also from a resilience perspective."

"With today's building energy technology, building owners can dip their toes into retrofits. Energy efficiency can be done in phases. They can do a whole building audit and create a multiyear plan, but then phase retrofits. They can use bulk purchasing across buildings for a subset of energy systems as a form of economies of scale and gain exposure to the retrofit process and its benefits."







THERE ARE OPPORTUNITIES FOR INNOVATION

LET'S CREATE NEW BUSINESS MODELS

"Our vision is to coordinate community development corporations (CDCs), who know how to put together proformas and business plans, with other grassroots groups in the community. From this partnership, you could create a cooperative venture where the collective assets of these groups, the social capital, monetary capital, etc., are partnered with assets from the utility and venture capitalists. This collective could then build a microgrid and as the profits come in, a sliver gets distributed to each investor. CDCs might not be bringing dollars, but they are bringing social capital which can be monetized and rewarded."

"We have to come up with financial vehicles, like on-bill financing, that ultimately provide a set of resources for folks that are locked out of capital markets. We have to rethink the structures by which we've conceived of ownership of property. The concept of an easement is something in the law that has been tied to property for a long time. We can use this concept to our benefit."

"One idea I've had to help raise funds for energy efficiency programs is to bring in corporate sponsors, where they provide donations (for instance, materials) in exchange for cooperative advertising and endorsement. So, for example, Dow Corning is a huge supplier of insulation, and while insulation saves a lot of energy, it is also a huge cost for New York's programs. If NYSERDA could buy down the costs of materials, that could create a huge impact."

"When it comes down to how renewables and energy efficiency benefit tenants, I would like to see a situation, starting with investments in energy efficiency, where the savings flow directly to building operators for reinvestment in better building maintenance, better programs, cross-subsidization of community-services type programs, etc."

LET'S RETHINK RELATIONSHIPS

"Let's give value to low-income customers on prepay; they are helping the utility reduce working capital."

"We need to be thinking of these customers as resources. If you are connected to the grid, you have value to contribute, but the biggest challenge is to change our perception of the customers as value instead of load users."

"Currently, the only cure that we have for the system failing to deliver is to strengthen the hegemony of the utilities. If energy efficiency doesn't get out to the poor, the utility is given the role to deliver. We need a better solution than 'if they don't reach their target we give them more money."

"For demand side programs, let's create low-income set asides. For example, make it such that at least 20 percent of your (utility) achievable potential must be achieved with low-income customers."

"To the extent that rate-payer funds exist (e.g., the Clean Energy Fund), regulatory and state leadership needs to encourage/incentivize utilities to build up more robust low-income programs. Con Edison has the makings of a really good one. Are they perfect? No, but they are well positioned."

"The tax code should be used to make for-profit utilities that provide electricity—a necessary public good—responsible for protecting the broader public good (i.e., creating access for all segments of our society to renewable energy). This would hold utilities responsible for enforcing this protection. The bottom line would no longer be just about dollars and cents. This creates a different corporate mindset about what companies are responsible for other than what the PSC dictates."





THERE ARE OPPORTUNITIES FOR INNOVATION

"I am concerned that loopholes in a REV future would allow utilities to deploy DER that most benefits them and not the local community. A utility may benefit from owning rooftop PV, but the community may benefit most from solar thermal, for example."

"(We need to) hold responsible (those) officials responsible for successfully engaging with community organizations."

LET'S IMPLEMENT SCALABLE TOOLS

"How do we make all these programs and services for low-income customers into a true one-stop shop? It may be hard to pull together, but there's a big opportunity to make things easier as customers go from applying for services to having a retrofit in their home."

"Can we corral these things into one place where people can access and act upon them, can we pool information in a way that people can digest and act upon it? When the (EPA Clean) Power Plan did this it was very influential, as is reflected in the REV order itself."

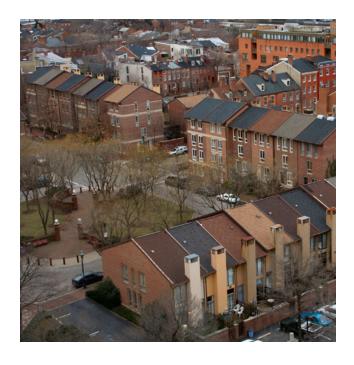
"We're building a low-income energy clearinghouse. We're partnering with other organizations that serve the low-income community, such as food banks, health insurance companies delivering Medicaid supplies, and others. They're doing outreach through their networks, while we have the expertise to install efficiency and apply for incentives. At the same time, we're doing outreach, so the relationships go both ways. If someone is in distress, we can refer them and otherwise we can provide services. We're social workers without the degree."

"The time savings, between filling out four of five sets of paperwork versus checking a box to prequalify for food stamps, Medicaid, or some other program with closely aligned requirements, is huge. I think database technology makes it easier for a low-to-moderate-income person, whose time is very valuable, as long as you protect the right to privacy."

"We have a program that benefits a lot of customers. There is a lot of programming, and it is not very administratively burdensome. The program can provide maximum benefit because of that. We coordinate directly with a city database of low-income customer eligibility for a wide range of social programs."

"We're trying to advance approaches and create tools that enable easier replication by other building owners."

"On multifamily housing, New York tends to be ahead of the game. We have had multifamily weatherization programs before almost anywhere else. California has a California Utility Allowance Calculator (CUAC) program, a tool designed to calculate project-specific utility allowances for low-income housing projects. It is one area in which California is ahead of New York."







LET'S STREAMLINE AND AUGMENT CURRENT PROCESSES

"How do you streamline the long list of processes that parties must undertake to do energy efficiency and make them easy?"

"Are there ways to make the umbrella of supportive organizations for low-income communities more connected?"

"So the way organizations have dealt with turf wars has been having NYSERDA defer to Weatherization Assistance Program. Homes and Community Renewal (HCR) receive funding and then they allocate it down to the counties. Then NYSERDA has participation in the EmPower program. Generally, these programs have been administered separately with less than ideal coordination. Some subgrantees have been able to combine funding. For instance, NYSERDA's money can't often cover health and safety issues in people's homes while HCR can. Combining funds to address all project needs can help get a project done."

"Product innovation is really important in this space for solving specific solutions. The best solutions though, lie in the modification of embedded processes in the world of financing and real estate. The energy assessment should be part of the overall assessment. Tools should easily be accessible and on the desk of the loan officer."

"Look at NYSERDA studies as to why there has been relatively low uptake of programs around the state, particularly in New York City. Examination of those barriers, understanding of those barriers should be incorporated into the REV process. What type of structures can we put in place to overcome these barriers?"

"Aggregation is a big catchphrase, but are there ways to aggregate consumers in order to significantly buy down the cost of service? There have been mixed results for aggregation in New York. A lot of it has taken advantage of subsidies so the cost reductions have been a little misleading, but there may be ways at the community level to bring together a block and work with some contractors to provide reduced costs, streamline, and get a few blocks done in a couple of weeks."

LET'S CREATE TRACTION THROUGH MARKETING

"How did Marlboro get an entire generation of grown men to smoke? Why does everyone now want a Tesla? We need marketing in this, we need people with creative minds to sell energy as something that's precious."

"Energy is not top of mind and it probably won't ever be, but we should be increasing awareness."

"Why don't we use customer service inbound calls to upsell low-income customers on energy efficiency programs and related services? This is not uncommon, but we don't do it here. In particular, utilities could promote set-price block rates to help ease them out of arrears."

"We have to be very cautious to not cross the line between providing service and upselling customers. When customers call in about an issue that may be safety related, for instance, utilities need to maintain a position of trust so we can address the safety concern. If we start selling things, our trust with the customer could be diminished."

"Most building managers don't know about weatherization opportunities. They think of weatherization with a small 'w'—they don't know about the Weatherization Assistance Program."







LET'S USE CONSUMER BEHAVIOR TO OUR BENEFIT

"Our program serves people who don't pay for electricity, mainly in public housing. We educate them about energy conservation. Our main goals are to educate them on energy usage, water usage, and phantom loads. NYCHA pays \$550 million on energy bills every year. Through our program, we reduced energy usage in some buildings by 20 percent by showing residents how they were a part of the bigger picture. We show them how they can reduce their carbon footprint and affect climate change. We tell them how their actions help to preserve the public housing they live in."

"I think it would be really cool to take a development and do all the capital and work to change residential behavior. That's the experiment I really want to do. So take a development, submeter it, educate tenants, and have everyone be responsible for their bills so that they'd have incentives to save energy. It'd be great to have this microcosm and see if you could really change people's mindsets."

"How do you capture mindshare? It takes more ethnographic research, in-depth interviews, and understanding what people care about...what makes them want to dig through the tax code? If you go to those communities in NYCHA projects that were hit hard during Sandy, all their power was shut down. But it wasn't just that. They were forced to evacuate. You make the sale that you won't have to evacuate again if you get a CHP unit, that could be much more powerful than 'this is clean and benefits the environment."









THERE ARE OPPORTUNITIES FOR INNOVATION

LET'S RETHINK RATE DESIGN AND COST BENEFIT TESTS

"We are very uncomfortable with discrimination in rate design, especially as many low-income customers are of color. But let's discriminate in a helpful way to benefit low-income customers. For example, they may be very inexpensive to serve if their load is a box fan and a refrigerator (flat, like an industrial customer)."

"Prices need to reflect that if we have DER in the South Bronx that also has the effect of improving air quality, that's a huge value and that should be included in the way that resource is valued."

"We can reveal prices and costs in rate design, but do so with rewards rather than penalties. For example, induce customers towards a more palatable usage/ load profile using a 'value-of-savings rate.'"

"A peak reduction by a poor person in the city may be worth more than a similar reduction in the suburb by an affluent customer. Value emission reductions based on geographic considerations; you live near generation, you get more credit, for example. If you experience more externality, you get a higher bounty. Attribute to DER a realistic and time-sensitive emissions reduction benefit."

"I refuse to accept the limitations of cost effectiveness tests as they are traditionally performed...let's get creative." "Cost tests get in the way; demand side programs should be more focused on effectiveness and uptake and less on TRCs and impact measures."

"The cost-effectiveness test can get in the way of uptake; it is too narrow, it looks at things on one plane. You need to implement effectiveness criteria or analysis/assessment that takes into consideration other things you are trying to accomplish. Cost is important but could be offset by other things you are trying to accomplish."









THE CHALLENGES ARE CONQUERABLE

WE NEED A DIFFERENT APPROACH

"We're faced by really big, bold, hard to solve, intractable problems like how to rehab massive buildings with thousands of units and tons of issues. But at the same time, New York City has adopted the 80 by 50 goal as a problem we can solve. We need to think of big problems like asthma clusters as solvable, and something I wish we would think more about. As New York City proved with the Clean Heat program, you can make dents and save lives."

"There are conflicting priorities. An 80 percent reduction by 2020 needs to be balanced with equity considerations."

"I don't see how it works unless we have people participating and seeing the benefit, feeling the benefit, and becoming invested in clean energy. I don't see us succeeding in a clean energy transformation without a tremendous amount of engagement with as many people as possible. The only way to move against special interest is people participating and investing. If they do and it's done right, they won't want to go back. It's like Obamacare, I don't want to go back."

"In my past, I was a social organizer and I was willing to fight. But I had an epiphany that this wasn't necessarily the best way to get things done. Now, I think it's much more productive to work with others rather than fighting others."

"There is something worth chasing with low-income customers in terms of program design, rates, etc. I'm just not sure what it is. You need a total systems approach."

"The opportunities are not just in electricity. For example, I think the commission should be looking at the big opportunities for oil-to-natural gas heat programs."

DEFINITIONS OF SUCCESS

"Our mission is to increase and scale energy efficiency in affordable multifamily housing with an eye towards poverty alleviation and the health cobenefits that it can have. A real piece of the pie is, (are low-to-moderate-income communities) getting their fair share of energy efficiency investments?"

"The goal for New York should be to ensure fewer households are terminated from service, which will mean having less uncollected revenue for the utilities, and waste less energy."

"I'd really like to see meaningful change at NYCHA. In particular, it would be great to see a 25-year plan for renovating and retrofitting its current buildings, bringing on new buildings, and tenant education and outreach. Whether that will happen is a really good question, but it's a do or die situation."

"Ironically, I do think the low cost of energy has resulted in low mindshare. If we change the costs of energy, we need to make sure that we don't further harm the low-to-moderate-income sector because bills are already high for them."





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THERE ARE REASONS TO BE OPTIMISTIC

"Where we've come in 10-15 years is amazing. I have a feeling once REV comes out, once you have AMI deployed, there are going to be new services and offerings, things that we can't even conceive of today, that are going to help low-to-moderate-income and other New Yorkers. I just don't know what they are."

"There is the opportunity for full participation in a clean energy future, where we figure out what the solutions really are. We can make it so that in New York City and New York state, all the horrible, crumbly housing that makes kids sick and have asthma will be restored and beautified. All this will be made possible and profitable, and the green communities people can learn about the utilities space, and have access to the huge money that comes out of it, and the low-income advocates will also be down with this program."

"The best way to get people engaged is to get them working, above and beyond anything else. If you can create jobs from these efforts, create training opportunities, you're no longer turning it into something we're telling you to do, you're turning it into something you're doing with us. Ideally, this is something all low-to-moderate-income communities would jump at. For AMI deployment, we're talking 3,000 meters a day, that's a lot of people doing that work. If you get communities as a part of that, that's a lot of interest, a lot of potential for buy-in."

"If we're going to do a thousand retrofits in this region, if we were to create jobs in this region, jobs could go to people in this region who need jobs. That's a very different model from going to either the best or cheapest contractor, but to leave it up to the market how that job gets done and what the work is. That's a very different sort of way of approaching these questions as an economic development tool and an environmental and climate change tool."

"Shifting funds between and within government agencies doesn't mean cutting jobs. That's what people are afraid of. What is much, much more likely is that their jobs will be repurposed because there's still plenty of work to do."

"I have seen even in politically conservative communities, energy and climate are no longer nonstarter issues. New York state does not have as much political resistance to tackling these issues as before."

"Everyone talks in state government about breaking down silos across agencies. You're not seeing as much resistance to (consolidating government agency low-income and energy efforts) as I would have expected."

"The main priority of our members is energy affordability. Unlike other issues, it excites and engages everybody."









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"As long as there is a connection to other problems that low-to-moderate-income customers face, you can have traction because customers have control. The rent guidelines board determines how much your rent goes up, Albany determines whether or not deregulation lives or dies. Government controls everything, and they are so hard to reach because they've all been bought off. And they aren't even in New York City, they are upstate officials. Everything feels so out of our control sometimes, so we can say, 'Look, this is one place where we can help you."

"Low-income communities in New York are not uniform. Some are very politically organized and have put themselves in a better place. There's some even taking on a 'do-it-yourself' mentality where they feel like they can't procure municipal and state funds (or at least public funds are too restrictive) so they have applied for foundation grants and done some creative work. For instance, in Sunset Park, post-Sandy, they have done some amazing work to install drainage systems in people's backyards to control flooding."

"What's beautiful about people who come from communities and understand authentic community engagement is that they don't think about things in a bubble or think about things from now to 20 years. They think about now to 100 years and the long-term impact on people who aren't even born yet. Oftentimes when we lean on business or we lean on government, they have a very short sight based on past experience. That isn't relevant in REV, there is no point of reference."

"The current political climate is a huge opportunity for change, with Cuomo, de Blasio, and a new assembly speaker."

"This moment is critical in terms of marrying resources with regulation. The best time to make change is when you have some resources and real commitments, and that's what we have in New York right now."





