

Inside Citywide Podcast Transcript

Episode 5: Carbon Neutral by 2050

Michael Santos: You are listening to the Inside Citywide podcast, brought to you by the New York City Department of Citywide Administrative Services. Inside Citywide provides you with a behind the scenes look at some of the work we do to serve the people of New York City.

Nick Benson: Hello, welcome to Inside Citywide. I'm Nick Benson.

Belinda French: I'm Belinda French. Thanks for joining us today.

Nick Benson: For those of you who follow New York City government, you know New York is a global leader on climate action. The city is setting ambitious goals, including being carbon neutral by 2050 and has made major strides towards reaching this goal.

Today's guests are two of the key players behind the planning and implementation of this important work.

Belinda French: Our first guest is Anthony Fiore, deputy commissioner for energy management at DCAS and the city's chief energy management officer. Welcome, Anthony.

Anthony Fiore: Thank you both. I'm excited to be with you all today, especially on the heels of climate week.

Nick Benson: We're also joined by Ben Furnas, the director of the Mayor's office of climate and sustainability. Thanks for joining us, Ben.

Ben Furnas: Thanks Nick. Hi Nick. Hi Belinda. Hi Anthony. It's really lovely to be with you all this morning.

Belinda French: So, we want to start by letting our listeners learn a little bit about each of our guests today and the work that they do.

So, Ben, I'm going to start with you. You were appointed by Mayor Bill de Blasio to serve as director of the mayor's office of climate and sustainability earlier this year, but we know you've been working on climate and sustainability issues for years. So, can tell us a little bit about your background and the mayor's office of climate and sustainability?

Ben Furnas: Absolutely. Thanks so much, Belinda. I've been with the city since 2014, so that's about seven years now working in various issues, associated with climate and sustainability. Throughout my time with the city, I've had the great honor of working on a lot of major inter-agency initiatives to make New York city a better place to live, like vision zero to reduce traffic fatalities and make it safer for folks to get around, one NYC, the city's long-term strategic plan as well lots of initiatives related to transforming our streets and our built environment. In my previous role, I served as the deputy director of the office of policy and

planning and worked very closely with, both first deputy mayor, Tony Shorris earlier in Bill de Blasio's term, and then later Dominic Williams, the chief policy advisor. I've worked for many years with the department of citywide administrative services on everything from electrifying the city's vehicle fleet to improving the efficiency of our buildings, installing solar, retrofitting lots of public facilities.

And now, as director of the Mayor's office of climate and sustainability, it's really sort of a culmination extension of a lot of the work I've been doing for my entire city government. The mayor's office of climate and sustainability is dedicated to dramatically reducing carbon emissions, across the city and also improving quality of life in the here and now. Something that's so exciting about taking action on climate is we can create a safer and healthier city for the future, but also correcting inequities, improving air quality and making life just nicer to live for New Yorkers right here.

Belinda French: Thanks, based on your experience to date, I'm excited to hear about the progression and just being in DCAS, I want to thank you for your important contribution to this work to date. So, thanks.

Ben Furnas: Absolutely. DCAS is one of my faves.

Nick Benson: and Anthony, much of the work you and your team do at DCAS focuses on how city government can reduce its energy use and its carbon footprint.

Tell us a little bit about your background and what you and the energy management team at DCAS.

Anthony Fiore: Well, that's right, Nick, let me first also thank Ben for his support over many years. We've been working very closely together. I feel like we're almost joined at the hip, but, you know, I developed a real passion for the environment as a very young kid.

Now I'm going to date myself. I used to watch Mutual of Omaha's Wild Kingdom hosted by Marlin Perkins and Jim Fowler on Sunday evenings with my dad and later on Wild America with Marty Stoffer. And it was really these childhood experiences that focused my education on the sciences and how we can protect the welfare of the environment and all the plants and animals that occupy it.

This eventually resulted in a degree in public health and environmental health science. And it was this nexus between ecological and public health that led me to work on climate change mitigation. You know, climate change is not just about changing weather. It's about the impacts of that changing weather on the environment and how we continue to exist in it.

And climate change mitigation work starts with acknowledgement of how we are contributing to climate change and the understanding that we have the power to alter this contribution. So, I feel really lucky and honored to have the City of New York as the platform on which to work, to change how we as a species exist in our environment for the betterment of the ecology and ourselves.

I started with the city 22 years ago, as a microbiologist, ensuring the safety of our drinking water. From there, I moved into environmental health and safety to make certain that city operations did not negatively impact the environment or its work force. Energy specifically became a focus of mine. I was chief of staff for our operations at our department of environmental protection and looked to understand how we could better leverage government assets to help fight climate change.

One of the programs I worked on during that time was separating organic food scraps out of solid waste and processing that food waste through the wastewater treatment process to create a renewable fuel, to provide heat and electricity to our facilities and for people to heat their homes and cook with.

After that, I became director of energy regulatory affairs at the mayor's office of sustainability, where I was the primary energy policy advocate for the city. Now for almost the past five years, I've had the pleasure of being at DCAS, where my team and I are responsible for buying all the energy needed to run government and reducing the greenhouse gas emissions from government operations, also known as our carbon footprint. To do this, we manage a \$700 million plus budget to buy the energy each year and almost a \$4 billion, 10-year budget to invest in clean energy generation and energy efficiency to make our buildings and processes cleaner.

Nick Benson: That's great, and you guys do such incredible work. You know, one of the purposes of this podcast is to highlight the good work of public servants. And I think your history shows that this is a passion that you have. It's not just a job. And I know that your team is so mission driven and they work the long hours and they do the extra work. So, it's really incredible to see what what's your team does. And I think your example really sets the tone for that.

So, thanks for everything you guys are doing.

Anthony Fiore: Thank you, Nick. And I have to tell you when I first came to DCAS, the first thing I recognized is the passion for the work that everyone does. It's incredible and it's refreshing.

Belinda French: Ben, you gave us an overview of your background and the work of the mayor's office of climate and sustainability. But tell us about some of the city's big picture climate goals.

Ben Furnas: Absolutely. The city's main overarching climate mitigation goals, so reducing our contributions to climate change, is to reach carbon neutrality by 2050. And when I think about that goal, I think about all the different places where we're currently generating greenhouse gas emissions, largely by burning fossil fuels, like oil and gas. And thinking about what it means to live in a carbon neutral city. We think about building a transportation system where New Yorkers have lots of ample choices to get around safely and sustainably, whether by walking, biking, or taking public transit. And if they're driving, they're driving an electric vehicle, and that means creating the infrastructure ready to support the electrification of over a million internal combustion engines in cars and trucks all across the city. And it also means transforming our streets so they're much safer and easier to walk and bike on, so bus service gets much better and we're providing the resources necessary to

make sure that the New York City subway system continues to be the, I call it the high-quality electric mobility system that it is.

We don't often think about the subway. It's an electric vehicle, but it's one of the most important electric vehicles that we have. And it carries millions of New Yorkers every day. We also want to want to be thinking really seriously about our buildings. You know, buildings that use fossil fuels to heat and to cool and to power our buildings.

So, both onsite burning fossil fuel gas or oil in buildings, or in the energy system that provides the electricity. Those buildings. Those fossil fuel emissions are about two thirds of the city's green contributions to greenhouse gas emissions. And that means we want to be retrofitting buildings, setting really ambitious targets through things like the climate mobilization act, which passed in 2019, so building owners have every incentive to reduce the amount of fossil fuels that are burned on site and shift towards much cleaner and more efficient ways of keeping people inside their buildings, warm and cool.

As the weather requires, a big part of that work is not just setting tough standards through law, but also providing all the tools that building owners need in order to make these transformations, which is why we've launched something called the NYC accelerator program to help landlords all across the five boroughs, make the changes they need. It provides free, personalized, technical assistance to building owners to make these changes.

Just this week, I'm getting a little ahead of myself, but we'll be talking about this more in the coming days, we're going to be launching New tools for a single family, one to four family homeowners to make the changes they need in the homes that they live in.

To put solar on their roofs and shift away from fossil fuels for their heating and cooling in their buildings. We also think a lot about the 14 million tons of trash that New York City sends to landfills or incinerators every year. And we're working on policies to help New Yorkers use less. So, create less waste and also shift away from sending waste to landfills, expanding recycling, and as Anthony mentioned, really trying to divert the organic waste out of being sent to landfills. So that's everything from food scraps to the sticks you might have in your yard. Getting it out of something that we're sending to landfill and really using it in a beneficial way, whether it's for compost or for energy generation, or other ways to use those food scraps, in a more sustainable, more dynamic way.

You know, another major thing that we're doing is holding fossil fuel companies responsible for their role in this crisis. We've brought a set of lawsuits against fossil fuel companies for misleading New Yorkers and the climate change consequences of their products, and we've been working really closely with the city's pension funds to shift away from investments in fossil fuel companies and towards companies and investments that are going to be part of the solution to climate change. And that's work we're really passionate about.

Really the thread that connects all of this is, as I mentioned before, is taking action to stop climate change while also improving the quality of life for people in the city right here and right now. And that means making life better and improving the health of every New Yorker in every neighborhood, all sorts of people from all walks of life.

It, particularly those communities that disproportionately have borne the brunt of pollution or bad air quality, whether they're living near a highway or they have buildings that have not been kept in tip-top shape. So, their air isn't as clean as it ought to be. We really think that by taking action on climate change, we can be working to address a lot of these problems. And that's what really drives us in all the work that we do.

Belinda French: I feel that you just hit the nail on the head. When I was listening to you, I said, all this relates to just the health and wellness of New Yorkers and as a native New Yorker, myself having grown up in the boroughs, despite us being as populated as we are, even today health and wellness is a sort of major thing to think about and so everything that we're doing for climate change is directly related to that.

Ben Furnas: Absolutely. It drives so much of the way we think about this. So, it's great to hear.

Nick Benson: Anthony, Ben gave us an overview of some of the broader climate goals, but what are some of the goals of city government? I know the city wants to lead by example and it has to be a part of the equation if we're going to reach these ambitious citywide goals so give us some insight into that.

Anthony Fiore: Absolutely. You know, it's really important that government not only talk the talk, but walk the walk and since 2007 when the city first published its comprehensive sustainability plan, it's set aggressive goals for itself to do more than the private sector sooner. We first set a target for ourselves in 2007 of reducing emissions, 30% by 2017, 13 years ahead of what the private sector was required to do.

And in 2014, we opt our commitment to a 35% reduction by 2025. And in 2019 as my kids like to say, we leveled up again, and on April 18th, 2019, the New York City council passed the climate mobilization act, which is an ambitious package of legislation that's designed to ensure the City remains on track to achieve our long-term emission reduction goals of 80% by 2050 and carbon neutrality in the same year.

And the centerpiece of that package is Local Law 97, which mandates that the city achieve a 40% reduction in emissions from city government operations by 2025 and a full 50% reduction in emissions by 2030 from a 2006 baseline. These new city emission reduction targets are more stringent than those set for the private sector.

Again, showing the city's commitment to leading the way and going further faster. Another thing that we're doing is testing new or underutilized technologies in city buildings through our innovative demonstrations for energy adaptability program, or more simply put our IDEA program, by leveraging our city assets to test innovative technologies. We aim to build use cases to facilitate broad private sector adoption while also addressing city building system or operational challenges and informing our clean tech strategy and investments.

Building on that foundation, recently DCAS is partner with the New York City Economic Development Corporation to establish a prop tech piloting program that takes advantage of the city's real estate to encourage job growth in innovation while making city buildings safer, healthier, and more sustainable.

Nick Benson: This is really incredible work that New York is doing. Are any other cities doing anything like this, any other American cities? Cause I just feel like we're on the cutting edge here in New York. What's it like around the rest of the country when it comes to cities on action, like this, Anthony?

Anthony Fiore: Sure. There are other cities around the country that are also making large investments in sustainability, you know, Boston and Philadelphia, Chicago, and others, but I think you're right. New York City is certainly leading the way, and the scale of what we have to do here is unlike anywhere else, and the city sits as a global platform. So, you know, it's not just other cities around the country, but what we do here in New York City is seen globally and that has ripple effects.

Nick Benson: Yeah, that's absolutely true. One of the major sources of greenhouse gas emissions in New York city is buildings. With New York being such a big city and having so many older buildings, what are we going to have to do to reduce emissions from buildings in the city? I imagine this could be costly in some cases. So, in addition to what needs to be done, how do you actually make it happen?

Ben Furnas: Thanks for bringing this up, Nick. We have over 1 million buildings in the city, and as I mentioned, they contribute nearly 70% of the city's total greenhouse gas emissions.

So that's the emissions that come from the fossil fuels that are burned onsite in those buildings, and also the fossil fuels that are burned to generate the electricity that powers those buildings. There's no way we can curb the climate crisis without decarbonizing those buildings, those structures, and there are really two types of building owners and building managers that we think about and we focus on.

So, if your building is larger than 5,000 square feet, so these are pretty large structures. It's not just single family or sort of smaller duplexes or triplexes. We have a program called the NYC accelerator that can get free technical support to help retrofit your building for energy efficiency.

This team is terrific. They can help identify individualized solutions for buildings, help you finance the retrofits, and help guide compliance with these really tough and ambitious local laws that we've passed requiring these types of changes. So, we have everything in place to support you, and I understand that that cost can be a barrier, but through both New York City accelerator and something that we call CPACE, that stands for Commercial Property Assessed Clean Energy financing. But what this essentially means is this is a financing tool that the city has launched that lets building owners take out a loan, make some changes to their property and pay back that loan through their property taxes.

This means that they pay it back, it means it runs with the building so if they sell the building, the next building owner just pays it as part of their property tax bill. And this means they can get financing on much more favorable terms than they would otherwise. And in most cases, no cash upfront up ahead and they pay it back based on the savings that they get from their energy bills.

The second group of, of buildings we really think about is homeowners with buildings with one to four units. So, a single-family home, or maybe a duplex or a triplex. For those types of

smaller buildings, if you're an owner of one of those homes, you can visit www.nyc.gov/electrifynyc to get free services today. So, our team can help you electrify your home with air source heat pumps, which is a type of high efficiency system that provides both heating and cooling without the use of fossil fuels and solar panels to help make your home more energy efficient and reduce your energy use and generate electricity right on your roof.

All of these things can make your home more energy efficient, potentially reduce your electricity bills and really increase the comfort of your interior spaces. We can make these investments today. The technology is there, and we really just have to all work together to make these really important improvements, both for the sake of folks right now, and also for the future.

Nick Benson: And how does people take advantage of this assistance? Is there a website or a phone number? How do people get in touch?

Ben Furnas: Yeah, so folks can visit www.nyc.gov/electrifynyc, particularly on the homeowner side.

Nick Benson: That's great, thanks.

Belinda French: Anthony, building off of what Ben just said, and you touched upon this earlier, what is the city doing to reduce greenhouse gas emissions from its own buildings? DCAS manages 56 public buildings, and of course there are thousands of other properties owned by the city. So what work is happening now? And what are the plans moving from?

Anthony Fiore: That's right. Belinda DCAS serves as the hub for energy management across all agencies and the budgets we administer for energy supply and efficiency measures are invested across the whole portfolio of some 4,000 plus buildings. As you can imagine with that size portfolio, buildings contribute the overwhelming amount of greenhouse gas emissions.

In fact, as Ben mentioned earlier, two thirds of our emissions come from city buildings. Since 2014, DCAS in partnership with city agencies has invested about \$715 million in approximately 8,000 energy conservation measures across 1600 unique buildings. That makes up more than 50% of the city government's building square footage. And by all measures, these investments are paying off. Investments have decreased energy use by 2.3 million MMBtus. And for those unfamiliar, that's about as much energy as used by 188,000 city residencies. We've also managed to avoid more than \$80 million in annual energy costs.

And we've reduced emissions by about 244,000 metric tons. That's the equivalent of removing 53,000 cars from the road permanently. The city will also continue to maximize solar potential on the rooftops of city buildings and other infrastructure. Currently, we've completed 90 solar installation projects with a total capacity of over 13.7 megawatts and an annual production of 15.7 million kilowatt hours.

And that's enough electricity to supply the needs of over 3,600 New York City residencies. All said, city governments reduce greenhouse gas emissions by about 23% as compared to 15%

in the private sector. You know, you asked about going forward, right now we have about the same level of investments identified for going forward as we've completed in the past.

And we're looking for ways to accelerate the pace of energy efficiency and clean energy generation projects. To drive our efforts, I think there's four aspects of energy management that are really important. The first is data analytics. We really need to equip our building operators with the tools to comprehensively and smartly analyze our energy data to identify opportunities for operational adjustments or projects to improve efficiency.

You know, the second big thing I think is behavioral change. We really have to pursue outreach and training to elicit behavioral change among building users. That's both the operators and the tenants. The third is enhance operations and maintenance. You know, we really need to strengthen and support the adoption of energy efficient operations and maintenance practices.

If we don't optimize the way we operate and maintain equipment, we're never going to get the most out of our existing equipment. And we're really just going to be wasting money on new investments. So, some of the data analytic tools and behavioral change initiatives that I just mentioned will contribute to this effort.

And then finally, energy efficiency and clean energy investments. You know, we can no longer afford to replace aging equipment and instead we have to embrace the very latest energy efficiency and clean energy generation technologies. And you know, that may mean more intrusive projects that maybe take a little longer to complete, but that's really, what's going to drive the peak emission reductions.

Belinda French: Thanks for explaining the road ahead. The data that you mentioned earlier is pretty impressive, it sounds like we should give a shout out to the other city agencies who are leading the charge as well, along with us and the staff behind the scenes that are doing this important work, so thanks.

Anthony Fiore: Absolutely Belinda, we could not do this alone. It's not just the energy management professionals, but it's our building operators and all of our support staff that wrap around. It's truly a community effort.

Nick Benson: Ben, another major contributor to greenhouse gas emissions is transportation. While most New Yorkers primarily rely on mass transit, you still have a sizable chunk of city residents and commuters who are driving vehicles. What is the city doing to minimize the environmental impacts of transportation, particularly from cars and other on-road vehicles?

Ben Furnas: Yeah, thanks for that question, Nick. You know, I think it's important to acknowledge that a lot of the pollution that comes out of the tailpipe, it doesn't really affect everyone equally.

So, in our city alone, respiratory illnesses from traffic pollution led to over 300 premature deaths and 800 ER visits and hospitalizations every year. So, this is air that's dirtier than it ought to be giving kids and young people and the elderly in particular, you know, asthma and other types of respiratory conditions. And you know, it obviously disproportionately

affects a lot of the communities that have suffered from bad air quality for a really long time. So, the way we shift away from that is by electrifying vehicles and shifting away from the use of gasoline and internal combustion engines. So just in the past couple of weeks, we released something we're calling the electrifying New York plan with the department of transportation to help make the shift to electric vehicles, more affordable and more convenient than ever for New Yorkers. It means expanding, charging stations all across the city to help folks feel confident that they'll have a place to charge if they shift to an electric vehicle, and ultimately, you know, I think a lot of this is going to come from action at the federal government and at the auto companies.

And, really what we've seen, even in the past year is a dramatic sea change in the way the automobile companies and the federal government is talking about this. I think it's clearer than ever that the future of cars and trucks in the United States and really around the world is electric. The auto companies have been setting really ambitious goals. We're doing our part, both with our city fleet and with the infrastructure needed to support electric cars, and we're really excited about all of those shifts. One thing I always like to remind us all though, is obviously, New York city, part of the reason we have such relatively low carbon emissions is because a lot of us don't use a car at all to get around.

So, we rely on, on the subways and biking and walking to do the trips that we take every day, and a lot of the way in which New York City is going to achieve its climate goals is really leaning into that part of our lives. So, making sure that the transit system is high quality and reliable, and we can use it for almost all the trips that we take.

It means making sidewalks safer. It means having a high-quality network of protected bike lanes. So even people who don't think of themselves as cyclists, feel like it's a totally comfortable and normal way of getting around. It's just hopping on a bike to get from one place to another, instead of having to rely on a car for so many trips. That's really how we're going to do that.

And, and our goal is that by 2050, 80% of trips taken within the city will be done without the use of a car at all. And all the other trips are going to be taken in electric cars. And so that's how we're thinking about this. That's our goal. And just as with everything else, there are real climate benefits and there are also real safety benefits when a street is safer for walking and biking, it means fewer people get hurt or injured or goodness forbid killed just by getting around. And it means much, much cleaner air because you don't have all that exhaust coming out of the tailpipe of cars that rely on gas.

Nick Benson: Yeah. And what you, you mentioned about the auto industry very quickly seeming to turn towards electric vehicles. I mean, I know general motors recently has made big moves, ford has made big moves. What do you think caused that? Do you think they just recognize the inevitability of fossil fuels being unsustainable or, you know, I know like here in New York, we're transforming our entire city fleet to electric vehicles that they're starting to get the demand, or is it a little bit of both a supply and demand?

Ben Furnas: I think it's a combination of a lot of things coming together. I think there've been a lot of really exciting technological breakthroughs on the battery side and electric mobility in general, and I think, you know, the policy direction from the federal government really has become clear with the incoming Biden administration.

And I think more and more states and cities all across the country are setting really ambitious targets, we among them, to have fully electric vehicle fleets. And so, you know, the car companies in the United States see that this is not just the direction that the United States is going.

They see that's the direction that the world is going, and so they want to build the cars and trucks of the future and that means building electric.

Nick Benson: It's definitely really exciting and a great development for sure.

Belinda French: Anthony, in addition to the work, the City of New York does for retrofitting and reducing greenhouse gas admissions from its operations, another part of the equation is the actual sourcing of the energy the city uses. What is the city doing to power its operations through renewable sources?

Anthony Fiore: Belinda you, you really know your stuff. Is there any way I can get you to be on the team? I think it's great. Now look, we know that in order to achieve the deep energy reductions, climate science tells us, we must, in order to avoid the most catastrophic impacts of climate change, we're going to have to, as Ben mentioned earlier, stop burning fossil fuels for heat and hot water in our buildings and using it in our cars and a primary way to do this is to electrify heating, hot water, and transportation.

You know, that only makes sense though, if the electric is produced from renewable energy. And so, this is something I've been working on for a long time for the city and after considerable advocacy by the city, the New York State Energy Research and Development Authority (NYCERDA) put out a solicitation in January for projects that could deliver renewable energy into the city over new transmission infrastructure. This is a big deal. There's been no new transmission infrastructure built in the state for the last 30 years. And then in April, we sent a letter to NYCERDA started stating our intent to pursue a joint purchase with them for enough renewable energy to meet a hundred percent of our electric need.

I know NYCERDA is in the final stage of recommending an award to the public service commission for approval. We'll evaluate that and determine if it meets our needs and objectives for a city investment. But I have to say, I think we're closer than ever to getting to an agreement before the end of the year, to have enough renewable energy to meet a hundred percent of our electric need.

Belinda French: That is so exciting. So, I actually want to transition to Ben because I want to ask you the same question, but for the entire city. So how is the city working with utility providers and others to ensure more renewable energy sources are powering New York and what are the city's plans for generating more clean energy within the five boroughs, such as through solar and other measures.

Ben Furnas: Yeah, thanks Belinda. So, everything that Anthony described is so important for meeting the broader citywide goals as well. That means, you know, working with the state to bring new transmission lines, carrying high quality renewable electricity from north of the city into the five boroughs. And it means maximizing the ability of us to generate clean and renewable electricity right here on rooftops all across our city. So that means both making it

easier than ever to have solar on our rooftops. That means making it easier to permit. It means supporting building owners with potential financing and it means supporting the expansion of energy storage. Cause you know as you can imagine, solar energy works when the sun is shining and it's great to be able to store some of that electricity so you can use it when the sun isn't shining, when it's cloudy or overnight. So, making it easier to install solar, making it easier to install battery storage all across the five boroughs. We think that's just totally critical. And along with upstate renewables and other sources of renewable electricity that comes from outside the city, we're really enthusiastic about the prospects of offshore wind.

You know, that's something that the state has set really ambitious goals for the federal government is helping push along and that's going to be a big part of the puzzle to make all of the electricity that New York City residents use, be as clean, renewable, and as climate friendly as possible.

Nick Benson: Anthony, one of the most significant pieces of climate legislation from the city council is Local Law, 97. It really set the frame for framework for what the city must do to combat climate change. The city is releasing a Local Law 97 implementation action plan, and you and your team have been integral in this plan. What is in this plan and what are the next steps DCAS and the city must take to make this vision a reality?

Anthony Fiore: Yeah, thanks Nick. This legislation is unprecedented. There's no other legislation that's been passed like it in any other city in the U.S or anywhere around the globe, as far as I understand.

It again requires the city to go much further, faster than the private sector. As I mentioned that at the top program, 40% reduction by 2025 and 50% reduction by 2030. So, we've developed an action plan that outlines a comprehensive, clear and actionable path to both these near-term targets and deep decarbonization over the long term. At its essence, the plan calls for a 20% reduction in energy consumption by 2030.

And that's, that's really an aggressive efficiency reduction. It also requires the purchase of renewable power to achieve a hundred percent renewable electricity for city operations. And as I just mentioned, I think we're closer than ever to getting there. We'll also continue with our solar installations to achieve a hundred megawatts of solar PV on city assets by 2025.

And then a new program for targeting heating electrification projects that displace combustion in city buildings, and we just spoke about on how important that will be. And then also investing in energy and emissions projects at our water resource recovery facilities as we seek to achieve a net zero energy at these plants by 2050 and purchasing electric vehicles and renewable fuels to reduce the footprint of our vehicle fleet.

In addition, the plan translates citywide emission reduction targets into agency specific emission reduction targets based on the agency's portfolio of building types. In this way, each agency will have a much clearer line of sight to its expected contributions to the overall mandate. And then finally, to put us into a best position to achieve these ambitious mandates, the plan recommends a number of policy and operational changes across five broad categories, including accountability and transparency, changes in human capital,

project implementation support, integrated capital planning, and optimized building operations. And we've touched on all of these to one degree or another previously, but over the coming months, we'll be working with numerous stakeholders to implement these recommendations.

Nick Benson: And that's one of the really great things about DCAS is we touch so many things that city government does. So, a lot of the things you just mentioned, you know, DCAS will be integral in. We manage 56 public buildings, you, of course manage the energy accounts for the city. We handle procurement. So pretty much everything city government does DCAS touches in some ways. It's definitely exciting that you guys are not only doing this implementation plan, but DCAS will have such a key role in seeing it through.

Anthony Fiore: Yeah, I think that's one of the best things about working at DCAS. We have these specialties across DCAS that are really going to help. You mentioned procurement, human capital is another one. It really facilitates and leverages our ability to achieve all of these reductions.

Belinda French: So Ben, the federal government seems poised to assist in the country's efforts around climate change, so how do you think this potential federal support can benefit New York and just broader climate action across the country?

Ben Furnas: The prospect of major federal action is both totally critical to achieve all of our goals, and it's incredibly exciting to have such a clear-eyed and ambitious partner in the Biden administration, and all the leaders in Congress who are pushing so hard for Congress to take major action on climate change.

So, everything from dramatically transforming our automobile industry, so that all the cars and trucks of the future are electric, to transforming the way electricity is generated and transmitted all across the United States. All of those things can be unbelievably jumpstarted with major federal action and everything that we're trying to do in New York City will be so much more straightforward if we have a functional and ambitious partner in the federal government.

I can't tell you how refreshing and exciting it is to actually have a federal partner that A: believes that climate change is happening and B: is committed to taking really ambitious action to transform the dynamics, not just to reduce our contributions to climate change, but, you know, improve the lives of Americans all along the way.

It's just so exciting. We're working hand in glove with the federal officials and our folks who talk to Congress to make sure that the package that they're thinking about is ambitious and big as possible because we need really ambitious goals to meet America's goals and to be a partner to all the countries around the world who are helping to reduce what is really a pretty existential threat to humanity as a whole, and is going to determine the fate of humanity in the 21st century, as cheesy as that sounds, it is true.

It is actually the fate of humanity in the 21st century. So, it's really exciting. And it's so refreshing to have such a partner in the federal government.

Belinda French: Ben, cheesy but so true. I can't agree with you more.

Nick Benson: Okay. I want to conclude with one final question to each of you. We know climate change is an existential threat, perhaps the biggest threat humanity has ever faced. We may not be around to see it, but if a century from now, the world looks back and it was successful in mitigating the worst consequences of climate change, what went right? Let's assume the best and let's assume that humanity pulled together and we tackled this threat.

How did we pull it off? Anthony let's start with you.

Anthony Fiore: Wow. I mean, nothing like lobbing, a grenade to close this out. Honestly, this could be a whole DCAS in of itself. But let me keep it high level this time around, and maybe we can dig into the details next time we get together. The United Nations international panel on climate change has acknowledged that the rates of system changes required to achieve the magnitude of reduction we've been discussing here today, have occurred in the past, within specific sectors and technologies and spatial contexts. But the rub is there's no document that historic precedent for the scale required in this case. So, we're going to have to be disruptive, right? This disruption is going to require a change in how we think and how we behave.

You know, this might be my training and evolution ecology that comes out, but as a species, we tend to be a little, more myopic, or shortsighted in our outlook with a tendency to focus on the here and now. And you know, that really makes perfect sense with respect to how we function on a day-to-day basis, but it can be detrimental to our legacy.

Simply put, the decisions that benefit us individually in the present moment may not be the smartest decisions to our collective long-term service. However, to accomplish the goals that we've put in front of us. We must make daily decisions in the context of our futures. We're going to need to embrace new technologies, even if that means learning new skills, negotiating new labor contracts, procuring, and contracting differently, accepting different norms in how we dress for work and where we work from, how we get around and what we eat. That's just some examples of the disruption that will be necessary.

You know, and as short-sighted, as we may be, we're also incredibly innovative, equipped with extraordinary fortitude and adept at overcoming the greatest challenges put in front of us. We see this time and again, in how we come together to help one another recover and adapt to some pretty significant impacts from climate change.

Whether it be the wildfires out west, the hurricanes down south, or the extreme precipitation flood events right here at home. I have no doubt that we can do this. If we're willing to embrace this disruption in how we think and act and come together, not only to recover and adapt to climate change impacts, but by taking individual and collective actions to prevent them from occurring in the first place. I see the spirit necessary for this embodied in my colleagues throughout DCAS, at the office of climate and sustainability, and across our agency partners. So, let me just try to encapsulate this sediment and end with a statement by Woodrow Wilson that I think reflects the attitude for success.

He said you are not here merely to make a living. You are here in order to enable the world to live more amply with greater vision, with a finer spirit of hope and achievement. You are here to enrich the world and you impoverish yourself if you forget the errand.

Nick Benson: That's beautiful, Anthony, and you absolutely embody that. And it rubs off on your team. I see it in the work that you guys do and the passion that you have, like that, that is incredible. And I don't know how to follow that up. So, I'm going to just let that because that was excellent. But Ben, now it's your turn. The bar has been set very high. how about you?

Ben Furnas: I don't have too much to add to Anthony and Woodrow Wilson, but I would say that if we're looking back from, a hundred years from now or when our kids, and our grandkids are looking back and thinking about the ways we were able to transform our lives, our city, our country, you know, to prevent, to prevent climate change.

They'll really see some of the best that humanity has to offer coming together to transform the way we get around. The way we heat and cool our buildings, the way we get our electricity, and really, I think it has to come from a sort of communal spirit to, to think not just about our lives in the here and now, but also for our kids and our kids' kids and people after that.

And I think at its best, this work, isn't just an energy revolution, but it's a moral revolution where we expand our empathy and understanding of possibilities in the future. And it's just so lovely to be with you all and working side by side with Anthony and all the folks across the city who are, who are doing this in such, in such good faith and with so much ambition and creativity.

And I hope folks, in the decades and generations to come will be proud. And, you know, I hope my daughter will reach the year 2050. She'll be around 30 and she won't have to think about climate change. You know, concerned with the 10,000 other things that 30-year-old people think about.

And she'll be like, oh yeah, climate change. That'll be a thing. That was the thing that my dad worked on. And I'm glad they got that all taken care of. So that's my greatest hope. So, fingers crossed and we're working really hard to make that so.

Nick Benson: Oh, well, thank you so much. And I'm really glad we could end on a positive note because there's too much at stake to be cynical and to feel defeated.

It's important to think about what success looks like, and I'm glad that our city has outstanding leaders like both of you who are laying out the vision and doing the work to help our city address this crisis. I really enjoyed our conversation and I want to thank you both for being here and for everything that you're doing for New Yorkers every day.

Ben Furnas: Thanks so much, Nick, this is great. And Belinda and Anthony.

Anthony Fiore: Yeah. And let me thank Nick and Belinda and you Ben as well. It was such a pleasure to be here with all of you today. And I have to be honest, I'm leaving this discussion refreshed and inspired, ready to take on the next day. Thank you all

Ben Furnas: Me too, Anthony, thanks.

Belinda French: Thank you so much. It's incredible to think about what we're up against and how much work there is to do. It's so impressive that New York City is leading the way, as it does in so many ways really.

Nick Benson: Yeah, absolutely. I also love that it's public servants who are playing such a vital role in this work.

Anthony and Ben, clearly listening to them today, you know, they're outstanding and they, and their teams are mission-driven and care deeply about the work. You can just hear the passion that they have for it.

Belinda French: So, so true. This is a global crisis, but New York City by being America's biggest city, and one of the most important economic centers in the world has a key role to play.

Nick Benson: And New York sets the example for the rest of the country and the world. And I hope the work that we are doing here can be replicated and build upon because when it comes to climate change, failure simply isn't enough. All right, as always, I want to thank our listeners for joining us. If you enjoyed our conversation, make sure you like and subscribe to inside citywide on Spotify, apple podcasts, or wherever you listen. You can also leave us a review on apple podcasts. Every review helps other listeners find our podcast. Thanks for tuning in.

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