COMMITTEE ON ENVIRONMENTAL PROTECTION 1 1 2 3 4 CITY COUNCIL CITY OF NEW YORK 5 ----- Х 6 TRANSCRIPT OF THE MINUTES 7 Of the 8 COMMITTEE ON ENVIRONMENTAL 9 PROTECTION ----- Х 10 11 November 17, 2021 Start: 12:10 a.m. 12 Recess: 5:44 p.m. 13 HELD AT: REMOTE HEARING - VIRTUAL ROOM 2 14 B E F O R E: James F. Gennaro, 15 Chairperson 16 17 COUNCIL MEMBERS: 18 Alicka Ampry-Samuel Darma V. Diaz 19 Stephen T. Levin Carlos Menchaca 20 Eric A. Ulrich 21 22 23 24 25

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0	COMMITTEE ON ENVIRONMENTAL PROTECTION 2
2	APPEARANCES
3	Ben Furnas
4	Director of the Mayor's Office of Climate and Sustainability
5	Anthony Fiore
6	Deputy Commissioner and Chief Energy Management
7	Officer at the Department of Citywide Administrative Services
8	Gina Bocra Chief Sustainability Officer at the Department of
9	Buildings
10	Emily Gallagher Member of the State Assembly
11	
12	Dale Bryk Regional Plan Association
13	Chris Halfnight Director of Policy at Urban Green Council
14	Donna De Costanzo
15	Eastern Regional Director for the Climate & Clean Energy Program at the NRDC
16	Samantha Wilt
17	NRDC
18	Santos Rodriguez Testifying on behalf of Gary LaBarbera, President
19	of the Building and Construction Trades Council of Greater New York
20	Charlie Samboy
21	Director of Government Affairs at the New York Building Congress
22	
23	Phil Skalaski Senior Vice President of Engineering and Energy Services at the Durst Organization
24	
25	Demos Demopoulous Secretary Treasurer and Executive Officer of Teamsters Local 553

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 3
2	APPEARANCES (CONT.)
3	Sonal Jessel Director of Policy at WE ACT for Environmental
4	Justice
5	Annie Carforo Climate Justice Organizer at WE ACT for
6	Environmental Justice
7	Lonnie Portis
8	Environmental Policy and Advocacy Coordinator at WE ACT for Environmental Justice
9	Pete Sikora New York Communities for Change
10	Rachel Rivera
11	New York Communities for Change
12	Zachary Steinberg Real Estate Board of New York
13	Josephine Zurica
14	American Council of Engineering Companies
15	Sara Bayer Associate Principal and Director of
16	Sustainability at Magnusson Architecture and Planning
17	Mark Ginsberg
18	FAIA, an Architect with Curtis & Ginsberg Architects in lower Manhattan
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20	Ben Prosky Executive Director of the American Institute of Architects
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22	Daniel Zarrilli Special Advisor for Climate and Sustainability at Columbia University
23	Columbia University
24	Keith Leonard Kinch General Manager and Co-founder of BlocPower
25	Sadiya Hogue Chairperson of the Board of Directors for NYPIRG

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 4
2	A P P E A R A N C E S (CONT.)
3	Meg Ahearn
4	NYPIRG's Program Director
5	Rocco Lacertosa Chief Executive Officer of the New York State
6	Energy Coalition, NYSEC
7	Michael Trunzo Shenker Russo & Clark, representing the National Biodiesel Board
8	
9	Corey Letcher Energy Consumers Council in New York
10	Diana Sweeney New York City Energy Consumers Council
11	
12	John Rice President and Principal of Legacy Engineers
13	Wendy Hijos New York Executive Director for the Consumer
14	Energy Alliance
15	Lauren Moss Senior Vice President of the Center for Active
16	Design
17	Eric Weltman Brooklyn-Based Senior Organizer with Food and
18	Water Watch
19	Jon Pope General Contractor
20	AJ Pires
21	President of Alloy Development
22	Amy Turner Senior Fellow at the Sabin Center for Climate
23	Change Law at Columbia Law School
24	Leah Stokes Associate Professor
25	
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	COMMITTEE ON ENVIRONMENTAL PROTECTION 5
2	APPEARANCES (CONT.)
3	April McIver Executive Director of the Plumbing Foundation
4	George Bassolino III
5	New York City Master Plumbers Council and a licensed Master Plumber
6	
7	Artie Klock Director of Trade Education at Plumber's Local One
8	Anthun Coldstoin
9	Arthur Goldstein
10	Bob Wyman Geothermal Expert
11	Zachary Fink ZBS Geothermal and the Association for Affordable
12	Energy
13	John Rath New York GEO
14	Bill Nowak
15	New York Geothermal
16	Rachael Grace Director of Strategic Policy Initiatives at
17	Rewiring America
18	Amar Shah Manager at the Rocky Mountain Institute
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20	Patrick Boyle Director of Policy for NYSAFAH
21	Atalia Howe
22	Assistant Vice President of Initiatives and Impact Investing at the Community Preservation Corporation
23	
24	Eric Liftin Architect from MESH
25	Ismael Diaz-Tolentino Environmental Justice Coordinator at Puente

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2	COMMITTEE ON ENVIRONMENTAL PROTECTION 6 A P P E A R A N C E S (CONT.)
3	Patrick Houston
4	New York Communities for Change
5	Edith Kantrowitz United for Action
6	Kim Fraczek Director of Sano Energy Preject
7	Director of Sane Energy Project
8	Lee Ziesche Community Engagement Coordinator for Sane Energy Project
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10	Karen Arpino Northeast Hearth Patio and BBQ Association
11	Moira McComas Policy Analyst at the Supportive Housing Network
12	for New York
13	Hillary Aidun Attorney at Earth Justice
14	
15	Lisa DiCaprio Professor of Social Sciences in the Division of Applied Undergraduate Studies in NYU's School of
16	Professional Studies
17	Anne Pernick SAFE Cities and Fossil Fuel Non-Proliferation
18	Treaty Community Manager at Stand.earth
19	Emma Urofsky Studying Sustainable Development and I'm a member
20	of WE ACT for Environmental Justice
21	Dorian Fulvio Lifelong New Yorker, a retired public servant and
22	an active member of 350 NYC
23	Monica Weiss Member of 350 NYC
24	Candee Kane
25	Member of 350 NYC

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 7
2	APPEARANCES (CONT.)
3	Jane Selden Datimad Nau Yark Gitu Garrunitu Gallara
4	Retired New York City Community College Instructor and a Member of 350 NYC
5	Ann Logan
6	Ross Pinkerton Physics Teacher in Manhattan
7	
8	Sabrina Maharaj Student at BMCC, Borough of Manhattan Community College in Manhattan NY
9	Miles McManus
10	Resident of Manhattan
11	Delia Kulukundis Resident of Long Island City
12	
13	Stuart Waldman Retired Children's Book Publisher
14	Samantha Galanti Full-Time College Student and
15	successfully completed training in the Climate Reality Leadership Corps
16	Ken Schles
17	Volunteer with Food and Water Watch
18	Matthew Lipschik Member and Volunteer with Food & Water Watch
19	
20	Hody Nemes Co-Founder and Leader of Jewish Climate Action Network NYC
21	Natalia Guanin
22	Natalie Cronin Mom and Daycare Provider
23	Amber Ruther Alliance for a Green Economy, AGREE
24	
25	Marie Pierre Co-Chair of the Brownsville Chapter of the New York Communities for Change

1 COMMITTEE ON ENVIRONMENTAL PROTECTION A P P E A R A N C E S (CONT.) 8 2 A P P E A R A N C E S (CONT.) 3 3 Georgi Page Volunteer with 350 Brooklyn 4 4 A Wilson 5 5 Harry P. Johnson 6 7 Rebecca Duvall Resident of Brooklyn 9 9 Nina Grigoriev Resident of Bay Ridge Brooklyn 10 10 Donna Gill 11 11 Member of WE ACT 12 12 13 14 15 16 17 16 17 18 17 18 19 18 19 10 20 11 11 21 12 12 22 13 14 15 15 15 16 17 18 17 18 19 20 1 11 21 1 11 22 1 11 23 1 11 24 1 <t< th=""><th></th><th></th><th></th></t<>			
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1	COMMITTEE ON ENVIRONMENTAL PROTECTION 9
2	SERGEANT LUGO: PC recording started.
3	SERGEANT JONES: Cloud started.
4	SERGEANT PEREZ: Backup is rolling. Just give
5	one second to confirm that this training is working
6	properly. Yeah, we're good.
7	SERGEANT LUGO: Alrighty, thank you. Good
8	afternoon everyone. Welcome to today's Remote New
9	York City Council Hearing of the Committee on
10	Environmental Protection. At this time, would all
11	panelists please turn on your videos. To minimize
12	disruption, please place electronic devices to
13	vibrate or silent. If you wish to submit testimony,
14	you may do so at <u>testimony@council.nyc.gov</u> . Again,
15	that's <u>testimony@council.nyc.gov</u> .
16	Thank you for your cooperation. Chair, we are
17	ready to begin.
18	CHAIRPERSON GENNARO: Thank you Sergeant. Good
19	afternoon, I am Jim Gennaro, Chair of the
20	Environmental Protection Committee. Today we will be
21	holding an oversight hearing on Buildings
22	Electrification. We'll also hear three bills and I'm
23	going to pretty much dispense with most substance my
24	opening statement because I'm very eager to hear from
25	the witnesses. And uhm, I had discussions with a lot
I	I

1COMMITTEE ON ENVIRONMENTAL PROTECTION102of people who are you know stakeholders in this3process. I am going to be you know keeping my4questions to a minimum for the sake of you know5getting through all the witnesses.

I will have ample opportunity to you know talk to 6 7 stakeholders as this process goes along. Please rest assure that this bill is what will at least you know 8 9 2317 is my full time job now. Every word of testimony that is submitted, I will read personally. 10 11 For 13 years, I was the Policy Analyst to the 12 Environmental Protection Committee and I Chaired it 13 for 12 years once upon a time. Now, I'm back. I'm 14 grateful to be back and uhm, so if I don't ask you a 15 lot of questions about your testimony or no 16 questions, it does not mean that I'm not interested. 17 It just means that I want to hear from everyone and 18 get everybody on the record.

We've got to do some things like you know limit you know testimony to two minutes. I don't ordinarily do that but with you know more than 100 witnesses, it is necessary to do that if we want to get done by midnight.

And I'm going to - with regard to 2317, we are joined by my good colleague Council Member Ampry1COMMITTEE ON ENVIRONMENTAL PROTECTION112Samuel. She will be recognized momentarily to give3an opening statement on her bill and talk about that.4It's my understanding that the other sponsors are not5here for their bill's. So, let me just say a little6something about their bills.

7 Uhm, Intro. 2091, will amend previously enacted local laws to the study of building electrification 8 9 in New York City. This legislation would require that the building electrification study consider 10 11 regulatory barriers to building electrification or lack of both, customer awareness and workforce 12 13 familiarity with electrification costs for property owners. And timeframes for electrification 14 15 consistent with state and local greenhouse gas reduction goals. That is Intro. 2091 that is 16 17 sponsored by Council Member Kallos.

18 The next 2196, which is sponsored by Council 19 Member Louis. 2196 would require an agency or office 20 designated by the Mayor to conduct a study of the 21 health impact of gas stoves. To make a recommendation as to whether it would be appropriate 2.2 23 to create a phase out policy of gas stoves. This Local Law would take effect immediately if passed. 24 And uhm, uh, with that, as I said before, I want to 25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 12
2	limit what I have to say both in my opening statement
3	and in my questions. I want to spare, with regard to
4	that. I would urge my colleagues — well, there is
5	only one colleague on the Zoom right now to be spare
6	with questions as well, so we can get as many
7	witnesses in and have them not wait so long. And in
8	terms of the run of show here, Sergeant and the
9	Committee Counsel, am I free to bring on Council
10	Member Ampry-Samuel for her opening statement or is
11	there other housekeeping stuff we need to do now?
12	COMMITTEE COUNSEL: Just a little introduction.
13	CHAIRPERSON GENNARO: Okay.
14	COMMITTEE COUNSEL; So, I'm Samara Swanson,
15	Counsel of the Environmental Protection Committee.
16	Welcome to the hearing on Environmental Protection.
17	Before we begin, I want to remind everyone that you
18	will on mute until you are called on testify when you
19	will be unmuted by the host. I will be calling on
20	panelists to testify. Please be aware that there
21	could be a delay in muting and unmuting, so please be
22	patient.
23	Please listen for your name to be called. I will
24	be periodically announcing who the next panelist will

25 be. We will begin with testimony from the

1COMMITTEE ON ENVIRONMENTAL PROTECTION132Administration, which will be followed by testimony3from members of the public. During the hearing, if4Council Members would like to ask a question, please5use the Zoom raise hand function and I will call on6you in order.

7 We will be limiting Council Member questions to five minutes, including responses. I will call on 8 9 you when it is your turn to speak. During the hearing, if Council Members would like to ask a 10 11 question, please use the Zoom raise hand function and I will call on you in the order that you raised your 12 hand. Thank you and now I will hand off to Chair 13 Gennaro and he can also hand off to Council Member 14 15 Alicka Ampry-Samuel.

16 CHAIRPERSON GENNARO: Thank you Samara. I thank 17 you for your good work over the years. You were 18 Counsel to the Committee in my previous tenure at the 19 Council and your good work continues and you just 20 reminded me that I am you know remiss in not doing 21 something that's very important, which is thanking a really terrific Committee Staff who had done such 2.2 23 great work in getting us to this big day. We just heard from Samara Swanson, we have Policy Analyst 24 Nadia Johnson, Ricky Chawla and Financial Analyst 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION142Jonathan Seltzer. And finally, last but not least by3any means, my own terrific Legislative Director4[INAUDIBLE 7:02] for all of their hard work. I5appreciate it very much.

And with that said, it is my great honor and 6 7 privilege to bring on the prime sponsor of 2317. Ιt has been a real delight working with her on this bill 8 9 and just as a colleague in general. And we're going to miss her once she goes to HUD and does great 10 11 things on the national stage. And I thank her so 12 much for the sponsorship of this bill and uhm, with 13 that send up, how about that you know Alicka, it was 14 pretty good right?

So, uhm, so it is my pleasure to recognize
Council Member Ampry-Samuel who will give her opening
statement on her bill.

18 COUNCIL MEMBER AMPRY-SAMUEL: It's been an 19 absolute joy Chair Gennaro to work with you just over 20 the past couple of months. I appreciate your 21 leadership and I do recognize your years of hard work 22 around the environmental protection.

23 So, thank you, thank you, thank you for all you 24 have done and I look forward to working with you in 25 the days to come.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 15 2 CHAIRPERSON GENNARO: Thank you Alicka. 3 COUNCIL MEMBER AMPRY-SAMUEL: So, I do also just want to thank you for having this hearing and uhm, 4 5 for the ability to discuss Intro. 2317. Commonly referred to as the Gas Ban Bill and I thank you for 6 7 giving me the opportunity to address the Committee 8 today. The 41st Council District, which I represent 9 10 encompasses Brownsville, Ocean Hill, parts of East 11 Flatbush, Crown Heights and Bed Stuey. In my 12 communities and communities like mine have 13 astronomically high levels of respiratory diseases 14 and poor health outcomes. Many of which are directly 15 related to climate justice and injustices. This legislation Intro. 2317 would effectively prohibit 16 17 the use of gas operated heating systems in new 18 construction or gut renovations across New York City. 19 The city has set a goal to be carbon free by 2050 and this bill codifies and creates the parameters to 20 21 ensure we meet that goal.

Ironically, the most effective communities are usually left out of conversations about climate change although our residents are literally paying

1COMMITTEE ON ENVIRONMENTAL PROTECTION162for the effects with their health and sometimes their3lives.

The illustration that I often use; you all have 4 heard me talk about this time and time again, is when 5 other parts of our city were converting to clean 6 7 energy buses, that all diesel buses were not taken out of service. They were sent to other depots like 8 9 the East New York Depot which services the bus lines that run through my district. It's ironic because 10 11 our residents contend with some of the highest rates of respiratory issues that are directly related to 12 13 environmental factors.

14 The stakes for our residents are very high and 15 I'm proud to represent their interests in that of the 16 entire city as we look forward to eliminating 17 aggressive reduction in greenhouse gas emissions. 18 Simple. As the experts have and will continue to 19 testify, when space and water heating appliance such 20 as furnaces and boilers burn gas or oil to produce 21 heat, they emit several dangerous pollutants. We can make a major dent in these emissions in our 2.2 23 atmosphere by prohibiting natural gas hookups in new buildings and gut renovations. 24

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 17
2	Although other locations have already realized
3	the goal. As New York City goes, the rest of the
4	country follows. So, I look forward to today's
5	discussion. I look forward to the attention that
6	will be placed on this issue and again Chair, thank
7	you for recognizing this pivotal moment in history.
8	So, on behalf of the advocates and friends that have
9	worked tirelessly with me to move this bill, we
10	appreciate you and today's the day to have this
11	discussion that we've been waiting for for so long.
12	So, thank you everyone and again, I look forward
13	to the discussion.
14	CHAIRPERSON GENNARO: Thank you Council Member
15	for your very gracious opening statement and your
16	kind remarks and your tireless advocacy on this bill.
17	It has really been terrific and uhm, thank you for
18	that and uh, I think I am clear to call on the
19	Administration, right?
20	But before I do that, just a word that the people
21	who will be testifying you know uhm, these bills
22	consist of words in our page. And uhm, you know the
23	best kind of testimony which really helps us the most
24	to fashion the best bill is testimony that goes you
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1COMMITTEE ON ENVIRONMENTAL PROTECTION182know directly to the worrying or you know essence of3the bill.

So, you see the bills; so, you know if you had 4 you know your druthers, you know the best testimony 5 is what would you do to you know add words to the 6 7 bill? To take words away from the bill? Change 8 words that are in the bill? This is what really 9 helps us. Sometimes you know philosophical discussions are great about how are planet is ailing 10 11 and like, we all get that but this is a you know, 12 legislative hearing and we want to focus, we want to 13 laser focus on you know 2317 and the other bill, so 14 try to be very succinct in giving us your best 15 testimony that you know directly effects the wording 16 of the bill if you are in a position to do that. And 17 with that said, it's my privilege to call the 18 Administration. I guess that's uh, I guess Samara, 19 you as the uhm, what's the proper term of art that 20 you're going to be playing here? 21 COMMITTEE COUNSEL: I'm going to administer the

22 oath.

CHAIRPERSON GENNARO: No, no, no but in terms of your role here today. Like, you're the what do you call the role.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 19
2	COMMITTEE COUNSEL: I'm the Moderator.
3	CHAIRPERSON GENNARO: The Moderator, correct.
4	Okay, yeah, Moderator, so you as Moderator, you know
5	please uh do your thing. Bring on the
6	Administration, you know swear them in and let's get
7	this thing going. Thank you very much Samara, I
8	appreciate it.
9	COMMITTEE COUNSEL: Oh, okay and now, I would
10	like to deliver the oath to the Administration. So,
11	I will call on them each individually to record your
12	answers to be followed by your testimony. So, please
13	raise your right hands. I don't see — I see a Gina
14	but I don't see Anthony Fiore or Ben Furnas.
15	CHAIRPERSON GENNARO: Oh.
16	C I'm here Samara.
17	COMMITTEE COUNSEL: I'm looking for Anthony Fiore
18	or Ben Furnas.
19	BEN FURNAS: I'm here as well.
20	CHAIRPERSON GENNARO: He's here. Uhm, Anthony's
21	here.
22	COMMITTEE COUNSEL: He's here?
23	CHAIRPERSON GENNARO: I see Ben. I see Anthony.
24	COMMITTEE COUNSEL: Okay, please raise your right
25	hand. Do you swear or affirm to tell the truth, the

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 20 2 whole truth and nothing but the truth before this 3 Committee and to respond honestly to Council Member 4 questions? 5 ANTHONY FIORE: I do. BEN FURNAS: I do. 6 GINA BOCRA: I do. 7 COMMITTEE COUNSEL: Okay, thank you. And now, 8 9 let's hear your testimony. 10 BEN FURNAS: Thank you so much Samara and thank 11 you Chair Gennaro for holding this hearing and it's 12 been really a delight to work with you in the run up to this conversation. 13 14 CHAIRPERSON GENNARO: Thank you Ben. 15 BEN FURNAS: Good afternoon everyone. My name is Ben Furnas and I am the Director of the Mayor's 16 17 Office of Climate and Sustainability. I am joined 18 today by Anthony Fiore, the Deputy Commissioner and 19 Chief Energy Management Officer at the Department of Citywide Administrative Services and Gina Bocra, the 20 Chief Sustainability Officer at the Department of 21 Buildings. 2.2 23 I want to thank Chair Gennaro and members of the Committee for this opportunity to testify on building 24 25 electrification and Introductions 2317, 2196, and

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 21 2 2091. A recent report by the Intergovernmental Panel 3 on Climate Change found that unless there are immediate and large-scale reductions in greenhouse 4 gas emissions, the world will continue to see 5 increases in the frequency and intensity of extreme 6 7 weather events and heat waves that would imperil 8 global agriculture and health. New Yorkers are 9 already too familiar with the serious consequences of extreme weather, most recently managing the impacts 10 11 of Tropical Storm Henri and Hurricane Ida. 12 As world leaders convened in Glasgow for the U.N. 13 climate change negotiations over the past weeks, it's 14 become clear that cities are leading the way in the 15 fight against climate change. The federal Infrastructure Investment and Jobs Act is providing 16 17 support for major new investments in decarbonization 18 and that, and the Big Build Back Better Act signal 19 that cities will be critical in our country's work 20 against climate change. 21

Cities are taking ambitious action to confront the climate crisis and build a green and just world, and New York City is leading the charge. Together with the Council, we have taken bold action to cut greenhouse gas emissions from all sectors as fast as 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 22 2 possible, including requiring buildings to undergo 3 retrofits, transitioning to renewable electricity, accelerating the shift to cleaner modes of 4 5 transportation, and creating green jobs. But there is more we can do and we must take every opportunity 6 7 to reduce greenhouse gas emissions for our city and 8 for our planet.

9 New York City is committed to achieving carbon neutrality by 2050. The fossil fuels used to heat, 10 11 cool, and power our buildings are responsible for nearly 70 percent of greenhouse gas emissions in New 12 York City. They also emit a wide range of air 13 14 pollutants that harm the health of New Yorkers, 15 especially our most vulnerable. New York City has 16 already been a global leader in building emission 17 reductions, notably through the passage and 18 implementation of the Climate Mobilization Act and 19 its centerpiece, Local Law 97, which places targets 20 on greenhouse gas emissions from existing large 21 buildings. With the legislation being proposed here 2.2 today, we can lead again.

The next generation of buildings is electric.
Setting ambitious targets for new buildings to be
built without reliance on fossil fuels presents an

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 23 2 opportunity for us to shape the future of our city 3 and lead the world in developing the high-efficiency, electric buildings of the future. To meet our 4 5 carbon-neutrality goals, improve air quality, and create a city that is cleaner and greener, it is time 6 7 for new buildings to be built without on-site combustion of fossil fuels. Gas or oil heating 8 9 systems lock buildings into fossil fuel 10 infrastructure for years to come and those are years that we do not have to waste. 11 12 All electric buildings are a solution to 13 improving the climate and the health of our residents. Buildings with efficient electric heating 14 and cooling have existed for decades and are 15 16 currently being built all over the world, including 17 in New York City. The technology is reliable and 18 functional, even in very cold weather. Cold climate 19 air source heat pumps, the best available technology 20 to provide high quality heating and cooling provide clean electric interior comfort well-suited to New 21 York's weather. These systems offer efficient 2.2 23 cooling, heating from temperatures below -10°F and operate at more than double the efficiency of 24 25 resistance or gas systems.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 24 2 These benefits to New Yorkers come with a 3 reasonable price tag. The cost to construct a new all electric building is relatively similar to that of 4 constructing a new building that heats with gas, and 5 because the building can be designed climate-friendly 6 7 from the beginning, they avoid costly retrofits down the line as we race towards carbon neutrality. 8 The 9 International Energy Agency reports that globally, almost 180 million heat pumps were used in 2020, and 10 that to reach net zero emissions, heat pump use will 11 12 need to increase significantly.

13 The IEA has also noted the importance of setting a date certain when new buildings will be electric 14 15 buildings in order to keep the world on what they 16 describe as the "narrow but achievable" path to 17 carbon neutrality by mid-century. Electrifying 18 buildings to cut greenhouse gas emissions is also in 19 line with recommendations by the New York State's Climate Action Council. 20

In 2021, the city conducted a study entitled, Pathways to Carbon Neutral NYC, in partnership with our utilities Con Edison and National Grid. This study found that electrifying heating and domestic hot water systems can provide immediate emissions 1COMMITTEE ON ENVIRONMENTAL PROTECTION252benefits in efficient buildings, even with today's3grid, and that these buildings get greener as the4grid gets cleaner.

In 2019, thanks to the work of advocates and our 5 partners at the state level, New York State passed 6 7 the Climate Leadership and Community Protection Act. The CLCPA committed us to 100 percent zero-emission 8 9 electricity by 2040. And even today, before the projected increase in renewable electricity, a 10 11 building drawing electricity from the grid creates lower greenhouse gas emissions and less air pollution 12 than one burning fossil fuels on-site for heat. 13 14 Now, this change is needed but we are here to 15 help. We are committed to working with building 16 owners to provide them with the support they need to 17 shift away from fossil fuels. We have already 18 launched a number of programs providing personalized, 19 technical assistance and connecting building owners 20 and operators with financing.

The NYC Accelerator program is a \$33 million commitment to support a rapid transition toward decarbonizing our city's buildings, including electrification and other alternative technologies to reduce emissions from existing building system. As 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 26 2 part of this citywide effort, the Accelerator has 3 expanded its training and technical assistance offerings to support high-performance new 4 5 construction electric buildings that will set a new precedent for the future of our homes, schools, and 6 7 offices. We're also ready to support these changes 8 with financing.

9 Property Assessed Clean Energy financing gives building owners access to loans with no upfront 10 11 capital with payments that are tied to the property 12 tax bill. I'm very pleased to share today that 13 starting in January, thanks to legislation passed by 14 the City Council, PACE financing will be available 15 for new construction of electric buildings. We believe this shift will continue to grow the electric 16 building industry in New York, support the next 17 18 generation of high-efficiency buildings without 19 fossil fuels on site, and would help developers and builders comply with Introduction 2317. 20

Now, I'll speak briefly about each of the bills that are being heard today. Intro. 2317. We are excited to testify today on Introduction 2317. This bill represents a major shift in how new buildings will use energy and provide heating and cooling, and 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 27 2 we support this critical climate action. We are 3 looking forward to working with the Council and all of the stakeholders here today to ensure that the 4 bill is as ambitious as possible, while still being 5 achievable for builders and developers throughout the 6 7 city.

Introduction 2091, this would require a study to 8 9 determine the feasibility of electrifying existing buildings. The NYC Accelerator does a lot of work to 10 11 assist existing buildings in efforts to electrify and 12 reduce the carbon emissions. We would like to 13 continue to work with buildings to eliminate, as much 14 as possible, their fossil fuels on site. The bill as 15 currently drafted adds this study to the Long-Term 16 Energy Plan. We believe this is a critically 17 important topic that warrants detailed study, 18 however, the Long-Term Energy Plan is well underway, 19 so we are happy to discuss with the Council an 20 alternative mechanism to get this work done. 21 Introduction 2196 would require a study on the health impacts of gas stoves and a recommendation as 2.2

22 health impacts of gas stoves and a recommendation as 23 to whether it would be appropriate to phase-out gas 24 stoves. Robust research exists on the health impacts 25 of gas stoves and we support reproducing a report on 1COMMITTEE ON ENVIRONMENTAL PROTECTION282this existing research both at the national and local3level and inclusive of any equity implications to4inform policy recommendations and implementation in5residential settings.

To conclude, we really look forward to working with the Council on leading the way on this critical issue. Thank you so much for holding this hearing Chair. It's lovely to see so many people so passionate about this issue at this hearing today and now, I'm happy to answer any questions.

12 CHAIRPERSON GENNARO: Thank you Ben. Your 13 testimony is most appreciated. We've been talking 14 all along on this bill and so, uhm, I'm going to 15 forego questioning for the sake of my colleagues who may have questions and also to get to our host of you 16 know people that want to testify. Staff is just 17 18 letting me know that uh, we have other Council 19 Members on the Zoom. Members of the Committee. 20 Council Member Darma Diaz is with us, we thank her for being here. Council Member Menchaca is here and 21 Council Member Stephen Levin. All of the members of 2.2 23 the Environmental Protection Committee are here as well and so, I thank them for their attendance. And 24 I guess I will pose one guestion and I'm sorry to 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 29 kind of uh I'm giving myself a little you know latitude because it's a little off topic. Shame on me.

1

5 When I passed the first you know greenhouse gas reduction bill, you know New York City Climate 6 7 Protection Act of uh you know 2008. That mandated a 30 percent reduction in city generated greenhouse 8 9 gases in the city sector. That would be city building, city fleets, you know city facilities like 10 11 implants and other things. A you know 30 percent greenhouse gas reduction by 2017. 12 That was not 13 realized and then two years after that fell on and 14 you know Local Law 97 was passed. That deadline in 15 2017 was changed from 2017 to 2025 with a 40 percent 16 reduction.

17 This is one of the frustrating things about you 18 know passing good bills and making sure that they 19 make their way down the cracks. And so, because 20 we're talking about climate reduction, it sort of 21 points out that sometimes we pass bills and you know they are difficult to achieve and you know, the 2.2 23 administration itself - this administration and the previous administration has had difficult in meeting 24 25 that mandate.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 30 2 So, where are we now and how are we looking for 3 40 percent by 2025 because we missed the 2017? And this will be the only question I ask all day. It's a 4 5 little bit off topic. I'm giving myself a little bit of you know latitude here to ask that because you 6 7 know, the private sector is being asked to do 8 something here and the city hasn't lived up to what 9 it was supposed to do. And so, I think it's 10 important to tell people where we are on the city 11 reducing its own greenhouse gases. And so, how are 12 we doing? Like are we on path for uhm, on target for 13 40 percent by 2025? And you know, you can give a 14 brief reply because I don't want to take too much 15 time. 16 BEN FURNAS: Yeah, thanks so much Chair and 17 thanks for both passing that really crucial piece of 18 legislation and holding us all accountable. I think 19 we share the same goal of reducing emissions as 20 quickly as possible.

CHAIRPERSON GENNARO: I didn't put it in as a goal, it was a mandate. I fought to get that mandate. Everybody wanted a goal. Bloomberg wanted a goal; the Council wanted a goal. I wanted a

1COMMITTEE ON ENVIRONMENTAL PROTECTION312mandate; we got a mandate. Mandate is supposed to be3mandate so what do we got?

BEN FURNAS: So, we've been investing billions of 4 5 dollars to retrofit the city's municipal buildings to electrify the city's vehicle fleet and we're 6 7 currently seeking to build two new transmission lines that would bring clean and renewable electricity in 8 9 order to power city government operations. At this point, we're on path to hit that 40 percent reduction 10 11 by 2025. And I'd also love to have Anthony Fiore whose joining me from the Department of Citywide 12 13 Administrative Services to add any additional contacts that he thinks it warrants but we share the 14 15 goal and we're on track to meet that emissions 16 target. 17 CHAIRPERSON GENNARO: Uh, thank you Ben. 18 Anthony.

ANTHONY FIORE: Thank you Chairman. I also would mirror Ben's comments about thanking you for that initial legislation so long ago and I think it was really innovative and first of its kind.

23 So, let me just speak to the last kind of full 24 year of emission reductions that we have pre-pandemic 25 that's 2019. The investments that the city has made 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 32 2 in its buildings has reduced those emissions 23 3 percent. That's compared to 18 percent in the 4 private sector, so I do believe those investments 5 have paid off. We are leading the way here. With that said, there's much, much more to do and we look 6 7 forward to continuing a great relationship with you 8 in getting us there.

9 CHAIRPERSON GENNARO: Thank you. I thank you 10 Anthony, I do appreciate that. And now, I'll give an 11 opportunity to any of my colleagues who are on the 12 Zoom to ask questions of the Administration. So, 13 Samara, they're supposed to raise their hand and 14 you're supposed to handle that right? Does anybody 15 have questions for the Administration?

16 Oh, am I muted? No, I'm good, I'm on right? 17 Okay, Samara, am I to conclude that no one has 18 questions for the Administration? Uh, I see Council 19 Member Levin has his hand up. Uh, I recognize 20 Council Member Levin. Steve, you're muted. COUNCIL MEMBER AMPRY-SAMUEL: Hi, I'm unmuted 21 2.2 right now. 23 CHAIRPERSON GENNARO: Okay. 24 COUNCIL MEMBER AMPRY-SAMUEL: I had my hand raised before Steve. Hey Steve. 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 33 2 CHAIRPERSON GENNARO: Oh, I'm sorry. I'm sorry, 3 I didn't - hey, I'll tell you what. Uhm, why don't we do this. Uh, Samara, like rather than me being 4 the shot caller on who has their hand up, like you 5 know you're going to take care of that, okay Samara? 6 7 COMMITTEE COUNSEL: Yeah, so Levin - Ampry-Samuel and then Levin. 8

9 CHAIRPERSON GENNARO: Okay. Okay, it is my privilege to recognize Council Member Ampry-Samuel. 10 11 COUNCIL MEMBER AMPRY-SAMUEL: Thank you, thank 12 you, thank you. So, I just have two questions. Uhm, 13 one, does the city work with the utilities to 14 understand if electrification supply can meet demand 15 if more buildings go electric and clearly, I'm asking 16 that questions because we're constantly hearing that 17 we don't have enough energy sources to even do this. 18 And so I would like to speak on the work that the 19 city is doing with the utility companies to talk 20 about the energy supply.

And my second question is, you mentioned financing options, can you provide a little more detail about what's available come January and how? BEN FURNAS: Sure, yeah, thank so much for both of those questions Council Member. So, first on the 1COMMITTEE ON ENVIRONMENTAL PROTECTION342utility point. The city and Con Edison work really3closely to ensure that the grid is reliable and4resilient and we do that via direct conversations and5also as part of Con Edison's rate cases where they6plan their investments to accommodate the shift.

7 You know based on our conversations with them, I 8 believe they are testifying today, so I don't want to 9 speak for them but you know we have a very high level 10 of confidence that this type of shift towards 11 electric heating, towards the types of deep carbon 12 emission reductions are possible and consistent with 13 the types of investment plans.

I mentioned the pathways to carbon neutrality study that we conducted in partnership with Con Edison and National Grid and that sort of showed the way that with thoughtful and strategic investments the building electrification is possible and the addition of new buildings that are electric buildings is well within the capacity of our systems.

So, one additional point I would make is you know all new electric buildings that are highly efficient, because electric heat pumps tend to be more efficient then conventional air conditioning. As you know, we have what's called a summer peaking system. Meaning 1COMMITTEE ON ENVIRONMENTAL PROTECTION352you know our grid uses the most electricity during3the summer time when everyone is running their air4conditioners.

Heat pump systems are more efficient than 5 conventional air conditioning. Meaning that if a 6 7 building is built all electric with a heat pump that provides heating and cooling, they actually create 8 9 less strain during those summer months than they otherwise would. And so, that's just another piece 10 11 of information that gives us a level of confidence 12 here.

13 As to your second point, the new type of 14 financing available is called property assessed clean 15 energy financing. This is a program that was 16 authorized by the state and authorized by the City 17 Council and it allows developers to take out a loan 18 with no money down in order to provide financing for 19 that addit- any additional costs that might come from building an all-electric building and pay those costs 20 21 back on their property tax bill.

22 So, it means that the financing is less expensive 23 than it otherwise would be and it means that if they 24 sell the building, that loan travels with the

1COMMITTEE ON ENVIRONMENTAL PROTECTION362building rather than with the owner and making the3terms much more appealing.

You know, as I mentioned, we think the costs at this point are about comparable between an allelectric building and a fossil fuel building but to the extent that there is any serving differential, we stand ready to provide this category of financing to help folks ease those costs.

10 COUNCIL MEMBER AMPRY-SAMUEL: Thank you. Thank
11 you Chair.

12 CHAIRPERSON GENNARO: Thank you Council Member 13 Ampry-Samuel. Uhm, so Samara, like I should 14 recognize Steve or you should recognize him. I'll 15 recognize him.

16 COMMITTEE COUNSEL: Council Member Levin has his
17 hand up.

CHAIRPERSON GENNARO: Okay.

19 COMMITTEE COUNSEL: So, uhm, if you could call on 20 him.

CHAIRPERSON GENNARO: Okay, I recognize my goodfriend Stephen Levin.

SERGEANT AT ARMS: Time starts now.

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COMMITTEE ON ENVIRONMENTAL PROTECTION 37
 COUNCIL MEMBER LEVIN: Thank you very much Chair.
 Thank you very much Council Member Ampry-Samuel. I
 feel recognized, so thank you.

5 My question is so just to - I think I heard you 6 correctly Mr. Furnas that uhm, so the Administration 7 fully supports the legislation sponsored by Council 8 Member Ampry-Samuel 2319?

9 BEN FURNAS: Uh, yeah, we support the notion of creating a date certain after which all buildings 10 11 will be electric buildings. We want to work together 12 with the Council and all the stakeholders here today to set - to determine what that timeline ought to be. 13 14 We want it to be aggressive but also achievable and 15 we're looking forward to all the testimony here today to correct that. 16

17 COUNCIL MEMBER LEVIN: Okay. I mean, as we all 18 know, uhm, you know myself, Council Member Ampry-19 Samuel, you know we're leaving at the end of the year 20 and so, this is a bill that it's a new term. The bill would have to be reintroduced. It would have to 21 be uhm, uh, you know it would have to be reheard, 2.2 23 redrafted, the whole you know everything like that. So, if it were not to pass in the next six weeks. 24 So, is there a commitment from the Administration to 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 38 2 work to pass this legislation by our deadline which 3 is like really just a month from now? 4 BEN FURNAS: Thanks Council Member, the answer is yes. You know we think there's been an enormous 5 amount of thought that has gone into this from a 6 7 library of stakeholders and we're really ready to roll our sleeves up to get this done this year. 8 9 COUNCIL MEMBER LEVIN: Okay, can you talk a little bit about what uhm, what the administration is 10 11 doing beyond electrification for new construction and 12 what the Administration is doing around renewables and incentivizing retrofitting un renewables. Large 13 14 scale renewables, the solar farms and uhm and how 15 uhm, we're seeking to move to outfit our aging housing stock. A lot of it is retrofitting, so 16 17 what's the strategy, the long-term ten year strategy 18 for moving our building stock if its currently based 19 on you know fossil fuels moving it over to 20 renewables. 21 BEN FURNAS: Yeah, thanks so much for that Council Member. So, I would describe this as a sort 2.2 23 of two pronged strategy. The first as you identified

25 fuels that are used in our existing buildings

is about dramatically reducing the amount of fossil

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 39 2 including the efficiency of those buildings and you 3 know we do that both through the NYC Accelerator program which provides a high quality personalized 4 5 technical assistance to buildings to help them bring - come into compliance with Local Law 97 our really 6 7 ambitious carbon emission targets for existing buildings. And we provide technical assistance for 8 9 buildings that are subject to those laws and also a broader universe of buildings. Their efficiency in 10 11 proving tenant comfort, reducing their energy costs 12 and cleaning up their building systems.

The other half of that as you mentioned, is even as we're shifting away from fossil fuels, we also want to be making sure that our grid is as clean as possible and that means embracing every form of clean and renewable electricity that we can be bringing into New York City.

So, you know we've been working in close partnership with New York State to advance two brandnew transmission lines that would be directly connected into New York City to provide over 2500 megawatts of clean and renewable electricity from wind and solar and hydropower that come from Points North. We're also working with the state and the 1COMMITTEE ON ENVIRONMENTAL PROTECTION402federal government to accelerate offshore wind, which3will provide another major source of clean and4renewable electricity.

5 All this even as we want to you know be dramatically expanding solar on the roofs across the 6 7 five boroughs, you know another really important piece of the Climate Mobilization Act was this 8 9 requirement that new buildings should take a hard look at putting solar on their roofs. And we've also 10 11 been launching a new program called Electrify NYC, which provides support for one to four family 12 13 homeowners who are interested in putting solar on 14 their roofs and shifting to electric systems for 15 their work.

16 COUNCIL MEMBER LEVIN: What kind of support does 17 that take the form in?

18 BEN FURNAS: It's personalized technical 19 assistance to provide everything that you would need 20 to put that on your roof. We connect those with 21 contractors and also with technical support and financing that's available from the utilities -2.2 23 SERGEANT AT ARMS: Time expired. COUNCIL MEMBER LEVIN: And my last question is, 24 is there any reason and I apologize Chair. 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 41 CHAIRPERSON GENNARO: Please make it brief. COUNCIL MEMBER LEVIN: Very brief, last question. Is there any reason why a new building should have or would need to have gas as a heating or cooling source?

7 BEN FURNAS: So, you know I think for the overwhelming majority of new buildings, sort of 8 9 typical residential, typical office buildings, we think that they're really cost competitive electric 10 11 options available. Now, for some types of industrial 12 facilities, things that are much harder to electrify, 13 processes of fire, very high amounts of heat. We think that there's other low carbon technologies that 14 15 are available to help produce some of that but 16 electrification might not be the choice right now. 17 And I know the Council has had some thoughtful 18 potential exceptions for particular treatments that 19 they are looking to include in this bill and we think those are thoughtful options too. 20 21 CHAIRPERSON GENNARO: Thank you Ben. 2.2 COUNCIL MEMBER LEVIN: Thank you very much Chair. 23 Thank you. CHAIRPERSON GENNARO: Thank you. Thank you, 24

25 thank you Steve. Uh, Samara, any other Council

1COMMITTEE ON ENVIRONMENTAL PROTECTION422Members wishing to be heard or can I proceed with the3next witness?

4 COMMITTEE COUNSEL: I believe you can - I believe
5 you can proceed to the next witness. I think Gina
6 wants to testify. Gina Bocra.

GINA BOCRA: Thank you Samara. The Department of
Buildings does not have separate testimony but I
appreciate it.

10 COMMITTEE COUNSEL: Okay well then, it's just for 11 questions.

12 CHAIRPERSON GENNARO: Okay, uh, thank you Gina. 13 I want to thank you and all the members of the 14 Administration who have been our partners thus far 15 and will continue and so, thank you very much. And as we spoke yesterday, you are going to have people 16 17 stay for the duration of the hearing to listen to 18 every word of the testify correct? 19 BEN FURNAS: That's right.

CHAIRPERSON GENNARO: Okay, great, great and I'll be talking to you really soon, I am sure. And I'm going to call our next witness. This is a member of the State Assembly, Emily Gallagher. I know her by reputation. I know that she is you know deeply

1COMMITTEE ON ENVIRONMENTAL PROTECTION432involved in the issue of building electrification.3Many people know that she is the next witness.

You know being that she is an elected official, I am not going to put her on the clock but I hope that she will be economical in her testimony. And with that said, it is my privilege to call on member of the Assembly Emily Gallagher.

9 EMILY GALLAGHER: Thank you so much Chair. I am 10 really grateful to be a part of this hearing and I've 11 taken into account your words about being economical. 12 And so, I am going to not read my beautiful poetry 13 about uhm, the climate crisis. I will skip that. I 14 know we all know that.

15 So, at the state level, we've responded to 16 threats of the climate crisis so far with goals. 17 Uhm, but we really need so much action to be 18 happening and I'm really grateful for Intro. 2317 19 because I think this really sets the tone for the 20 rest of the state and if New York City can lead on 21 electrifying all of our buildings as well as the other Intro.'s that we've been hearing about, we will 2.2 23 be really able to move off the grid and there are other - there's other smaller cities in the state 24 that have done this already. Ithaca New York has 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 44 been working on this and they've actually seen a decrease in costs for their uhm, their developments. And it has been a very successful program.

So, I am really excited to see what this - what 5 innovation this will bring to our city and I think 6 7 our city is really in a leadership role here. If we can pass this bill to electrify buildings at New York 8 9 City's level of government, it's going to demonstrate to the entire state and the entire country that this 10 11 is absolutely achievable. So, we absolutely need to 12 pass this act.

13 Over 70 percent of greenhouse gases and emissions 14 are coming from buildings. They are the result of 15 the use of natural gas as an energy source and they're also a major cause of indoor air pollution. 16 17 And uhm, the air quality in my district is very low 18 in Greenpoint and Williamsburg. We have very high 19 rates of asthma, that is exacerbated by the indoor 20 air quality of outdated systems. But with all of the 21 new building that's happening in my district and 2.2 across the city, we actually have a really big 23 opportunity to not just improve our life here on earth in terms of the waterfront and climate. The 24

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COMMITTEE ON ENVIRONMENTAL PROTECTION 45 climate catastrophe that we're facing but also, for personal health.

So, I am absolutely in favor of this. I strongly urge the New York City Council to pass this Intro. and I will be following at the state level to pass it across the state. I think this is one of the most important things we can do in the next two years and I am really excited to see New York City be the first major city in the country to do this.

So, I think that concludes my thoughts. Uhm, just know that I am waiting for you all to do this, so that I can really pack the punch at the state level and convince everyone that this is the clearest way forward. So, thank you.

16 CHAIRPERSON GENNARO: Thank you very much Miss 17 Gallagher and you know please give my regards to my 18 environmental mentor Steve Englebright.

19

EMILY GALLAGHER: Yes.

20 CHAIRPERSON GENNARO: You know whom I go back 21 with to 1975, when I was in my teens and he was in 22 his 20's. Uhm, that's how it all started and the 23 rest his history. Thank you very much for being 24 here. I've been told by staff not to call on people 25 who want to question and not to call you know 1COMMITTEE ON ENVIRONMENTAL PROTECTION462subsequent witnesses because Samara is supposed to do3that.

So, I'll ask Samara if any members from the
Council have any questions for the Assembly Member
and uh, if not to call the next witness. And so,
thank you again. Thank you again Miss Gallagher, I
appreciate it and good to see you.

9 EMILY GALLAGHER: Yes, yes, I look forward to it.
10 CHAIRPERSON GENNARO: Okay, you bet.

11 COMMITTEE COUNSEL: I don't see any hands raised.
12 So, I believe I can call the next witness, which is
13 Dale Bryk from the Regional Plan Association.

DALE BRYK: Hi, thank you so much. Can we actually have Chris Halfnight first because my testimony is going to key off of his and he is going to go through the specific legislative language as you requested Chair? And thank you so much for the opportunity.

20 CHAIRPERSON GENNARO: Uh, uh, uhm, I will state 21 Samara that I don't have any problem with that. I 22 don't have any objection.

23 DALE BRYK: Thank you so much.

24 COMMITTEE COUNSEL: No problem.

25 DALE BRYK: We're trying to consolidate.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 47
2	CHRIS HALFNIGHT: Great thank you. Good
3	afternoon Chair Gennaro and Committee Members. Thank
4	you so much for holding this hearing today. I'm
5	Chris Halfnight, I'm Director of Policy at Urban
6	Green Council. We're an environmental nonprofit
7	working to reduce the carbon footprint of buildings.
8	As Dale mentioned my testimony today is aligned
9	with the Environmental groups who follow, namely RPA
10	and RDC and NYLCV and AEA. Uhm, and with the Chairs
11	permission, I'm going to take just an extra minute of
12	my colleagues time to quickly hit on a few of our
13	recommendations.
14	CHAIRPERSON GENNARO: Uh, first of all, I don't
15	see the clock running. Uhm, is the clock running?
16	Samara, is the -
17	SERGEANT AT ARMS: Yes, the clock is running.
18	CHAIRPERSON GENNARO: Okay, the clock is running.
19	I'm really not a fan of like one witness yielding
20	time to another. And so, I'll give you a few more
21	seconds on the clock but you know the standard is
22	like a few minutes per witness and so, let's do that.
23	So, put a couple seconds back on the clock and you
24	know because once I start making exceptions, it gets
25	to be a whole thing.
l	

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 48 2 CHRIS HALFNIGHT: Understood, I'll move quickly. 3 So, Urban Green is dedicated to an ambitious, equitable and affordable transition for New York City 4 5 buildings from fossil fuels to clean electricity. I'd like to frame my testimony with four key facts. 6 7 First, boilers, furnaces and hot water heaters emit more carbon in New York City than all uses of 8 9 electricity, accounting for 40 percent of citywide 10 emissions. These systems are our primary climate 11 challenge.

12 Second, heat pumps are so efficient that they 13 save carbon today, even with New York City's dirty 14 electricity grid. Third, research well released in 15 December shows our is ready . We have room to grow 16 building electrification now. And fourth, the 17 additional upfront cost to build all-electric in New York City is small. About two percent right now for 18 19 multifamily buildings.

That's why Urban Green supports Intro. 2317 and we recommend some important changes and I'm going to quickly focus on two. First, we recommend phasing in the requirements starting with buildings up to seven stories in two years and then adding buildings with eight or more stories in five years. We recommend

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 49 2 this approach because electrification is easier in 3 lower rise buildings and it's ready to go. Above seven stories, system design becomes more complex and 4 the biggest challenge is domestic hot water systems 5 in the large residential buildings. There are 6 7 limited equipment options on the market today and there's minimal industry experience designing and 8 9 installing efficient all electric hot water systems to meet the needs in those buildings. 10 11 So, an ambitious but reasonable phase in will vield a better result. Equally important, this 12 13 phased approach allows time for planned updates to tighten the energy code. That's how we can ensure 14 15 the new construction is not just all electric but 16 also highly efficient, which means lower utility 17 costs and increased affordability. 18 My second point today is that electrification is 19 much more challenging for existing -20 SERGEANT AT ARMS: Time expired. 21 CHAIRPERSON GENNARO: Uh, uh, what I'll do is I'll give him a few more seconds cause I ate up some 2.2 23 of his time. So, please carry on briefly Chris. CHRIS HALFNIGHT: Thank you very much Chair. For 24 major renovations to be included, the law - we 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION502recommend that the law have a clearly defined and3high threshold where renovations represents similar4electrification opportunities to new construction.

5 And if major renovations are not included, we 6 urge consideration of how city government can lead by 7 example with an electrification requirement for major 8 renovations of city owned property.

9 In our written testimony, we also recommend 10 lowering the Co2 emissions limit to address fuel 11 building. Adding electrification ready requirements 12 and adding more detail to make exceptions in the law 13 limited and justified.

14 Thank you very much for the opportunity to 15 comment. I'm available to answer any questions. 16 CHAIRPERSON GENNARO: Uh, thank you and you know 17 for sure I will uhm, you know read in detail your full written testimony. That goes for all witnesses. 18 19 Uh, I do have a question with regard uhm, you 20 mentioned fuel blends. Can you expand upon that a little bit? 21

22 CHRIS HALFNIGHT: Certainly. So, the bill 23 currently sets a carbon emissions limit on 24 combustion. And that limit is just below the carbon 25 dioxide release from combusting natural gas. Which

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 51 2 means zero emissions fuel like hydrogen blended with 3 natural gas, even just a very, very small amount of blending would push the emissions below that limit 4 5 and unintentionally, unlock the ability to install fossil fuel equipment in a building. Because 6 7 technically you could combust blended fuel in that equipment and not exceed the emissions limit. 8 9 CHAIRPERSON GENNARO: And you are - and you favor that or you don't favor that? 10 11 CHRIS HALFNIGHT: Uh, I think NRDC is going to 12 speak more directly to that. 13 CHAIRPERSON GENNARO: Okay. 14 CHRIS HALFNIGHT: But we are in favor of being 15 cautious because there are a lot of unanswered 16 questions about renewable fuels or blended fuels and 17 we think that taking that step should be very - be 18 done with eyes wide open. And right now, it's sort 19 of an - from our view, an unintended consequence of 20 the current structure. CHAIRPERSON GENNARO: Uh, but you know something 21 meets the standard or it doesn't, right? And so, if 2.2 23 we're doing this via - and the reason we're doing it via standard because people essentially have a right 24

to hook up to a gas. You know because that's a power

COMMITTEE ON ENVIRONMENTAL PROTECTION 52 given to people from the state, so you know we're doing this tricky BTU standard that we're you know all out to do. And uhm, so, would you propose that there be some study of that or you know, like how would we handle that in your opinion?

7 CHRIS HALFNIGHT: Absolutely, I think it's a very 8 important issue to look at going forward. Uhm, our 9 perspective right now is that we shouldn't open that 10 door until it is better examined and we're certain 11 that that's a direction we want to go for new 12 construction, in terms of enabling fossil fuel 13 equipment.

14 CHAIRPERSON GENNARO: Okay, uh, uh, to be 15 continued and I know you said that NRDC is going to 16 talk about that right?

17 CHRIS HALFNIGHT: Absolutely.

18 CHAIRPERSON GENNARO: Okay, so uhm, uh, thank you 19 Chris. Samara, are there any other you know Council 20 Members that wish to ask Chris a question?

21 COMMITTEE COUNSEL: I don't see any hands raised.
22 CHAIRPERSON GENNARO: Okay, well, let's call our
23 next witness.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 53 2 COMMITTEE COUNSEL: Well, the next witness is 3 uhm, Dale Bryk unless she doesn't want to testify 4 now. 5 SERGEANT AT ARMS: I'm sorry, Council Member Ampry-Samuels has a question. 6 7 COMMITTEE COUNSEL: Oh, okay. Okay, Council Member Ampry-Samuels has a question. 8 9 COUNCIL MEMBER AMPRY-SAMUELS: I think it's a 10 placement of my hand in my picture box. But just 11 real quick, everything that you just stated Chris, is 12 that inside of your testimony along with the recommendations that were made? 13 14 CHRIS HALFNIGHT: Yes, it is very much so. It**′**s 15 expanded in the testimony. 16 COUNCIL MEMBER AMPRY-SAMUEL: Okay, alright, 17 thank you. 18 CHAIRPERSON GENNARO: Thank you Council Member. 19 COMMITTEE COUNSEL: Alright, now Dale Bryk. 20 SERGEANT AT ARMS: Time starts now. DALE BRYK: Thank you so much and apologies for 21 that. Hi, I'm Dale Bryk, thank you so much Chair and 2.2 23 Committee for the opportunity, speaking on behalf of Regional Plan Association. RPA is an independent 24 25 organization that does research and analysis to

1COMMITTEE ON ENVIRONMENTAL PROTECTION542inform good public policies such as the policy you're3developing right here.

4 So, our goal as I think you've heard from many already and hopefully from everyone here is that we 5 have to be ambitious. We have to meet our climate 6 7 goals. We have to be pragmatic or it's not going to 8 work and we have to center equity and make sure that 9 we're making sure low income and affordable housing is at the front of the line, not the back as we 10 11 decarbonize our building sector.

And we endorse all of the uhm, the adjustments that Chris just went through and you'll see the details on that in all of our testimony as we hand it in and we think that with those changes, this bill is going to deliver on those goals that I just mentioned being ambitious pragmatic and equitable.

18 I want to just touch on some of the context here 19 because I think it relates to the questions including 20 the one you were just discussing. And that is the 21 State Law that the Assembly Member and others have mentioned. We have climate legislation at the state 2.2 23 level that requires that the electric grid is cleaned up. That we get to 70 percent renewables and 100 24 percent carbon free electricity. And we will ensure 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION552that that electricity is there and available to serve3the heating needs of buildings in the city and4throughout the state.

So, there's been a lot of -I' ve heard a lot of 5 push back in conversations from stakeholders that we 6 7 should wait until we finish decarbonizing the electric sector before we even really take bold 8 9 action on buildings and we absolutely cannot do that. If we do that, we will then have to retrofit all the 10 11 buildings later. We will have all these costs and a 12 continued expanded gas distribution system and those will be stranded assets that customers will have to 13 14 pay for. So, we feel very strongly that we need to 15 do in tandem the building sector -16 SERGEANT AT ARMS: Time expired. 17 DALE BRYK: And the tower sector. Thanks very 18 much. 19 CHAIRPERSON GENNARO: Thank you very much Dale. 20 Always a pleasure to see you. Uh, you know we'll be 21 continuing our conversation as we go forward. I'll ask Samara if anyone has questions for Dale and then 2.2

23 if not, we'll move forward.

24 COMMITTEE COUNSEL: I don't see any hands up at 25 the present time. COMMITTEE ON ENVIRONMENTAL PROTECTION 56 CHAIRPERSON GENNARO: Thank you Dale and if you can call our next witness, please?

1

4 COMMITTEE COUNSEL: The next witness is Donna De5 Costanzo from NRDC.

DONNA DE COSTANZO: I think I'm unmuted. 6 Okav, 7 good afternoon Chair Gennaro, Council Member Ampry-Samuels and members of the Environmental Protection 8 9 Committee. My name is Donna De Costanzo and I am Eastern Regional Director for the Climate & Clean 10 11 Energy Program at the NRDC. An environmental 12 organization that has been advocating for clean 13 energy policies and programs in New York for more 14 than 50 years. And we really want to thank the 15 Council for its leadership here, and especially thank 16 Chair Gennaro for his years of dedication and 17 longstanding legacy on these issues.

Efficient electrification of building systems is 18 19 the best, cheapest way to deliver the health climate 20 and jobs benefits of the net zero green energy economy to all New Yorkers but we need to do this in 21 a way that is as ambitious as feasible. Prioritizes 2.2 23 disadvantaged communities and improves affordability. NRDC strongly supports Intro. 2317 and moving it 24 forward as soon as possible and supports the 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 57
 recommendations of Urban Green Council as well as
 detailed earlier.

4 To reach the goal of equitably decarbonizing New 5 York City's building sector, we'd like to highlight just a few important points. So, first new buildings 6 7 are of course easiest and cheapest to make all electric and highly efficient. We shouldn't be 8 9 putting dirty fossil fueled systems that last decades into our new buildings. The more gas infrastructure 10 11 we build now, the longer all gas customers will be saddled with the expense of stranded assets. 12 And I 13 just want to highlight the importance of continuing 14 to prioritize energy efficiency in addition to 15 electrification. It saves people money on their utility bills, increases grid resilience and makes it 16 17 easier and cheaper to meet additional power needs and 18 meet our renewables targets.

Now, going to low carbon fuels, which was mentioned earlier. So called renewable natural gas or biomethane, which has been put forth as a building decarbonization solution, various contacts is a dead end solution for buildings. There isn't enough of it now or expected for the future. It's too expensive and we need to use what little there is sparingly and

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 58 2 strategically, for hard to electrify sectors, not 3 buildings. In addition, most importantly, it also 4 produces the exact same toxic air pollution as fossil 5 gas. Similarly, boosterism for green hydrogen in 6 7 buildings is diverting attention -8 SERGEANT AT ARMS: Time expired. 9 DONNA DE COSTANZO: From electrification. We need all new pipes to distribute it and new equipment 10 11 to burn it and it's also a risky solution to decarbonize buildings relative to prove it and 12 13 readily available high efficiency electric heat 14 pumps. 15 So, happy to provide additional information on 16 these points specifically on these issues and just 17 really appreciate the opportunity to testify today. 18 And look forward to working with the Council to 19 advance this policy. 20 CHAIRPERSON GENNARO: Thank you Donna. I qave 21 you a couple more seconds because you served for many years in the Council, as my counsel you know to the 2.2 23 Committee on Environmental Protection. You serve with great distinction and you've gone on to you know 24 to become a you know national leader on environmental 25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 59
2	issues with NRDC. I'm very grateful you know to see
3	you and to have the benefit of your views and for all
4	of the you know interaction that's gone on between
5	you and you know my staff and the staff at that the
6	Council. So, a privilege to be here with you today.
7	I don't have any questions because we're going to
8	talk you know down the road.
9	Samara, any questions for our Counsel alumna,
10	right? Did I say that right alumna or whatever? Our
11	Counsel Donna, anyone have a question for her?
12	COMMITTEE COUNSEL: I don't see any hands raised.
13	CHAIRPERSON GENNARO: Okay, so with that, we'll
14	thank Donna once again and I look forward to speaking
15	with her and call our next witness.
16	COMMITTEE COUNSEL: The next witness is Samantha
17	Wilt from NRDC.
18	SAMANTHA WILT: So, sorry Chair and members.
19	SERGEANT AT ARMS: Time starts now.
20	COMMITTEE COUNSEL: Samantha Wilt?
21	SAMANTHA WILT: I'm so sorry Samara, Donna
22	testified. We just didn't know who was going to be
23	available. So, I proceed my time. Thanks.
24	CHAIRPERSON GENNARO: Oh okay, thank you
25	Samantha.
I	

1COMMITTEE ON ENVIRONMENTAL PROTECTION602COMMITTEE COUNSEL: Okay, you're proceeding your3time. The next witness is Carlos Castell Croke from4the New York League of Conversation Voters.

SERGEANT AT ARMS: Time starts now.

5

6 CARLOS CASTELL CROKE: Hi, good afternoon. Hi, 7 my name is Carlos Castell Croke, I am the Associate 8 for New York City Programs at the New York League of 9 Conservation Voters. I'd like to thank Chair Gennaro 10 and Council Member Ampry-Samuel for the opportunity 11 to testify today.

12 Buildings are the number one source of emissions 13 in New York City, which is why building emissions 14 have been such an important policy issue over the 15 past decade. However, we have only seen building 16 emissions decrease 18 percent from the year 2005 to 17 2019, meaning that we are not on pace to meet any of 18 our citywide emission reduction goals. New York City 19 must implement ambitious legislation and programs to 20 fight climate change, and a bill like Intro. 2317 will help us get there by requiring a phase out of 21 the use of fossil fuels. 2.2

This legislation is important because building electrification will not only reduce emissions and fight climate change directly, but will also create

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 61 2 tens of thousands of clean, green jobs. An 3 overwhelming majority of clean energy jobs in New York are in the building sector, mostly due to 4 5 policies and programs like this that focus on clean electricity and energy efficiency. We can rapidly 6 7 increase the number of green jobs with policies that scale efficiency and electrification. Building 8 9 electrification will also let us utilize local renewables for fuel and keep our energy dollars in 10 11 New York State's economy.

12 However, building electrification will not be an 13 easy task. It will require thoughtful and pragmatic 14 policy that considers multiple different variables 15 including the rate of technological advancement and 16 lead times needed to implement a new way to build 17 buildings. Therefore we agree with our colleagues at Urban Green Council and RDC and RPA with the 18 19 following list of recommendations for Intro. 2317. Which I am not going to read but Chris said them all. 20 We also support the passage of Intro.'s 2091 and 21 2196 to help us study the feasibility of electrifying 2.2 23 existing buildings in order to further decarbonize and to study the health impacts of gas stoves so we 24 25 can fully understand how important electrification

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 62 2 may be not only to climate change but to public 3 health. Thank you. 4 COMMITTEE COUNSEL: Thank you Carlos. CHAIRPERSON GENNARO: Thank you very much Carlos. 5 Are there any questions for Carlos? 6 7 COMMITTEE COUNSEL: I'm not seeing any hands up. CHAIRPERSON GENNARO: Okay, well, let me thank 8 9 Carlos and the League of Conservation Voters. I have a you know long standing relationship with that good 10 11 organization. And then actually we have people kind 12 of broken up into panels and so, that kind of concludes our first panel and uh, Samara - and so, 13 the next four witnesses would constitute the next 14 15 panel so to speak. I don't want to read out all 16 their names but Samara will take care of that. But with that said, I yield to Samara who will call the 17 18 first witness of the next panel which consists of 19 four witnesses. 20 COMMITTEE COUNSEL: Okay, so the next witness is 21 Santos Rodriguez from the Building and Construction Trades Council of Greater New York. 2.2 23 SERGEANT AT ARMS: Time starts now. 24 SANTOS RODRIGUEZ: Thank you very much Chair.

Thank you Council Members. Good afternoon, I am

COMMITTEE ON ENVIRONMENTAL PROTECTION 63 2 Santos Rodriguez, I am here to testify on behalf of 3 Gary LaBarbera, President of the Building and Construction Trades Council of Greater New York and 4 5 vicinity in opposition to Intro. 2317.

CHAIRPERSON GENNARO: Uh, uh, uh, Santos, okay, I 6 7 just wanted to make sure the clock was started. Ιt just started. Please continue. 8

9 SANTOS RODRIGUEZ: Okay, the Building and 10 Construction Trades Council is an organization of 11 local building and construction trades unions that 12 are affiliated with 15 international unions in the North America Building Trades Union. Our local union 13 14 affiliates represent approximately 100,000 15 construction workers. The Building Trades mission is to raise the standard of living for all workers to 16 17 advocate for safe work conditions and to collect the 18 advanced working conditions for our affiliates as 19 well as all workers in New York City.

20 We agree that climate change is real and that we must act to reduce carbon emissions. However, we 21 must pay attention to details to ensure that we are 2.2 23 acting prudently and not just acting so that we can make headlines. We need a policy that will 24 25 successfully transition us to renewable power

COMMITTEE ON ENVIRONMENTAL PROTECTION 64
 economy. Intro. 2317 will not successfully
 accomplish its intended goals in our city under the
 timeline proposed in the bill. Pardon the phrase,
 but you can't simply flip a switch.

This transition simply won't happen overnight 6 7 just because we want to. We are opposing Intro. 2317 because the existing buildings that would be impacted 8 9 by Intro. 2317 are not designed to convert to high performance electric systems. Additionally, high 10 11 performance electric power systems are not fully 12 proven in large buildings. Aside from difficulties, this bill imposes on buildings operations. It should 13 also be noted that electric power grid in our city is 14 15 already stretched and stressed. Our city is no 16 stranger to power outages and such an occurrence 17 would have an even greater impact in electric 18 buildings and a multi-day power outage would render 19 those residents uninhabitable. 20 Similarly, it does not appear that anyone has considered -21 2.2 SERGEANT AT ARMS: Time expired. 23 SANTOS RODRIGUEZ: The policy will have on the cost. 24

COMMITTEE ON ENVIRONMENTAL PROTECTION 65 CHAIRPERSON GENNARO: Uh, uh, please finish your sentence Santos.

SANTOS RODRIGUEZ: Thank you. Will have a cost 4 5 on electricity. This bill will impose significant cost increase on the residents of an all-electric 6 7 building. For this reason, it must be prudent that we're charting the cost of our future. We need 8 9 bigger bridges to get from where we are to where we want to be. We need a just transition. We oppose 10 11 2317 because it is bad policy.

12 COMMITTEE COUNSEL: Okay.

1

13 CHAIRPERSON GENNARO: Thank you, thank you and 14 also, I've been - thank you Santos. I've been 15 notified by central staff that the best way to 16 proceed regarding questioning would be to wait for 17 all of the members of the panel to testify and then 18 we can visit the panel with questions. This came in 19 Samara from uh, yeah, it came in from central staff 20 to me.

So, why don't we follow that protocol. Let me just - I'm also you know central staff is feeding me information. Uhm, I think I've just been texted that Council Member Ulrich is here as well. I hope that is the case. I'm happy to recognize him and uh, so 1COMMITTEE ON ENVIRONMENTAL PROTECTION662we will - I'll do what I'm told and I'll follow the3protocol of having the four witnesses from this panel4each give their statements and then uh, you know5Council Members can question uhm, whomever they wish6in this four person panel and we'll keep that7protocol for successive panels.

8 Uhm, this is coming right from staff to me 9 Samara, so I guess we're going to do that, okay? 10 COMMITTEE COUNSEL: Okay.

11 CHAIRPERSON GENNARO: We're figuring this as we 12 go along. We're one happy bunch of people trying to 13 figure it out. And so, I thank you Santos and then 14 we'll have the three other witnesses from this panel 15 and once we get to the end of the panel, we'll open 16 up the panel for a question from members. Thank you 17 Samara.

18 COMMITTEE COUNSEL: Okay, the next witness is 19 Charlie Samboy from the Building Congress.

20 SERGEANT AT ARMS: Time starts now. 21 CHARLIE SAMBOY: Good afternoon Chair Gennaro. 22 We have a much larger submission, which we will 23 submit online for your reading. To be brief, we 24 support the intent of the bill to enhance the air 25 quality that we breathe. However, we do not believe 1COMMITTEE ON ENVIRONMENTAL PROTECTION672that this bill has been written in the manner that3explicitly accomplishes that objective and could have4tremendous consequences on our building industry.

First, this Intro. seems to ignore the status and 5 complexity of bringing the entire energy grid onto a 6 7 source that is much cleaner than fossil fuels. Much of New York City currently relies on burning of 8 9 fossil fuels and requiring that new or modified buildings convert to electric in the timeline that 10 11 the bill calls for. Simply, will divert the burning 12 of fossil fuels further upstream. Early this year, the governor announced two projects that will bring 13 14 18 million megawatts of energy down to New York. 15 However, those projects are not slated to come online 16 until 2025 and 2027 for each of those.

17 Secondly, the bill may have unintended 18 consequences given the broad application to new 19 buildings and existing buildings that may go under -20 that may undergo renovations. Without an appropriate phase in area for different building types and sizes, 21 we think the existing energy grid will be taxed and 2.2 23 will not provide for readily available technologies or cost effective methods to be implemented. 24 We believe a sound approach would be mandating for 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION682smaller, single or multifamily buildings of a certain3size and then scaling that to much larger and complex4buildings over time.

5 Lastly, we support a greener city. We support 6 resiliency efforts; however, we continue to believe 7 that this bill as written does not provide us with 8 enough direction to be able to accomplish its stated 9 goals.

Again, we will submit testimony for your readingat a later point and time.

12 CHAIRPERSON GENNARO: Thank you Mr. Samboy. 13 Please stay on until the end of the panel and we will 14 come back for questions if anybody has any for you. 15 Samara, next up.

16 COMMITTEE COUNSEL: The next witness is Philip 17 Skalaski from Durst Organization and the New York 18 Energy Consumers Council.

19 SERGEANT AT ARMS: Time starts now.

20 PHILIP SKOLASKI: Hi, thank you Chair and 21 Committee Members. I am Phil Skalaski, I'm the 22 Senior Vice President of Engineering and Energy 23 Services at the Durst Organization and the Co-24 President of New York Energy Consumers Council.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 69 2 I'm supportive of the bill; however, I believe 3 that significant changes are needed. Local Law 3217 should provide for hybrid heating options and an 4 5 exemption for cooking gas in residential units. Heat pumps can keep buildings reliably only at milder 6 7 outdoor air temperatures above 32 degrees Fahrenheit in modestly humid weather. 8

When paired with natural gas condensing boiler 9 systems, which can provide efficient heating at low 10 11 outdoor air temperatures, a hybridized heating system 12 would result in a more favorable solution that is 13 economical, reliable and sustainable. A limited use 14 of backup boilers would not only add significant 15 amounts of greenhouse gas - I'm sorry, would not add 16 significant amounts of greenhouse gas and would reduce pressure on the electric grid during winter 17 18 peaks.

19 It would also allow for important redundancy for 20 providing heat in the case of electrical outages. We 21 believe market drivers including Local Law 97 22 penalties will serve to curb the use of natural gas 23 and we are open to exploring how usage limits can be 24 set and regulated. There should also be an exemption 25 for cooking gas in apartments for the following four 1COMMITTEE ON ENVIRONMENTAL PROTECTION702reasons: Carbon impact of gas cooking is minimal.3Very little energy is involved in cooking with gas4and until the grid becomes greener, electric cooking5will increase carbon. And four, the electric cooking6systems available today are lacking and will further7increase carbon.

Based on case study of 560,000 gross square foot 8 9 multifamily residential building, the carbon impact 10 of gas cooking is minimal at only 40 tons per year, 11 which equates to approximately seven and a half percent of the buildings total energy usage. 12 13 Electrifying cooking will result in an additional 24 14 tons of carbon per year. This increase would remain 15 a carbon penalty until the grid becomes 40 percent cleaner than 2024 -16

17 SERGEANT AT ARMS: Time expired.

PHILIP SKOLASKI: Carbon coefficients. Uh, just real quick. The electric cooking systems are not the same as heat pumps. They use resistance electric heating and they don't have the same efficiencies as heat pumps. Thank you.

CHAIRPERSON GENNARO: Thank you. Thank you Mr.Skalaski. Uhm, please stay on for questions.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 71 2 COMMITTEE COUNSEL: The next witness is Demos 3 Demopoulous. 4 CHAIRPERSON GENNARO: Demopoulous. 5 COMMITTEE COUNSEL: Demopoulous. SERGEANT AT ARMS: Time starts now. 6 7 DEMOS DEMOPOULOUS: Thank you very much. You did very well. Uh, I want to thank you and good 8 9 afternoon Chairman Gennaro, Committee Members, 10 Council Members, and Assembly Members and everyone else in the audience. 11 12 I'm here to speak in opposition to the bill as written Intro. 2317. My name is Demos Demopoulous, 13 I'm Secretary Treasurer and Executive Officer of 14 15 Teamsters Local 553 and Secretary Treasurer of Teamsters Joint Council 16. Representing 120,000 16 17 Teamsters throughout the City of New York. 18 Intro. 2317 as it stands now and if passed, will 19 have a harmful effect on working families and in 20 industry that is made up mostly of small or medium sized family owned businesses. Who have been serving 21 customers in the five boroughs and providing good 2.2 23 union jobs with excellent pay, pension and medical benefits for their families. 24

1COMMITTEE ON ENVIRONMENTAL PROTECTION722Since 2012, the industry has been working hard to3reengineer its fuel and make heating oil cleaner by4blending biodiesel, which is a drop in fuel that can5replace conventional heating fuel without expensive6changes to customers heating systems.

7 We have helped the industry and any environment 8 by lobbying in the past to lower the sulfur content 9 in heating oil. And now, with blending of biodiesel 10 will further the goal of using a cleaner fuel and 11 protect the environment.

12 We urge you to consider this and not pass this 13 Intro. 2317 legislation and protect Teamster families 14 and I just want to add because Chairman Gennaro may 15 mention, back in 2008, we were instrumental in 16 working with him to lower the sulfur content not only 17 at the city level but also at the state level and we 18 achieved that along with the industry. So, thank you 19 for that Chairman Gennaro.

20 CHAIRPERSON GENNARO: Thank you very much Demos. 21 Yeah, I remember when we reduced the sulfur and you 22 know number four fuel and it was uhm and all the work 23 we've done together on biofuels. It's been great and 24 yeah, and so uh, you know what? Samara, I've got a 25 question, so I'm going to address my question to Mr. COMMITTEE ON ENVIRONMENTAL PROTECTION 73
 Skalaski of the Durst organization. Uhm, you know,
 Philip, you there? I want to make sure Philip is
 there.

PHILIP SKALASKI: I'm here, yup.

5

CHAIRPERSON GENNARO: Okay, we've heard testimony 6 7 you know earlier in the hearing about the efficiency of like the new breed of you know heat pumps so to 8 9 speak. We heard Ben Furnas and the Mayor's office of somebody you know talk about them being you know 10 11 working and you know in below zero temperatures and 12 you, you know indicated in your testimony that below 32 degrees, uhm, there's a real efficiency drop off. 13 14 If you could speak to that.

15 PHILIP SKALASKI: Sure. So, heat pumps are 16 essentially using outside air to pull the heat out of 17 the air and push it into the building right, so -18 CHAIRPERSON GENNARO: Right, yeah, so what you 19 have - it's what you have, so if you have zero degree 20 air, you're trying to take heat out of zero degree air. You know like there is heat in the air above 21 absolute zero of course but it just becomes harder to 2.2 23 I think that's your point, right? get at. PHILIP SKALASKI: It becomes a lot harder and if 24 25 you look at the efficiency curves of heat pumps, as

1COMMITTEE ON ENVIRONMENTAL PROTECTION742you get lower temperatures in humid climates, you3start freezing the outside condenser. And then the4outside condenser has to be defrosted and it uses a5defrost method to actually defrost that which uses6even more energy.

7 So, your efficiency numbers go way down when you get to very cold outdoor air temperatures. Uhm, so 8 9 again, very high efficiency above certain outdoor temperatures but as you get colder, yes, they still 10 11 work. They do work below zero. They are capable of 12 working but they get very inefficient at that point. 13 CHAIRPERSON GENNARO: Let me ask you this, you 14 know, you're with the Durst Organization, I don't 15 know how far flung the you know the Durst 16 Organization has buildings and what cities they have 17 them in or whatever but you know, perhaps you're 18 aware or maybe you have knowledge of you know other 19 cities that have you know our climate pretty much. 20 And are these systems being installed in large quantities in the cities that you know roughly have 21 you know New York City's temperatures? 2.2 I'm not 23 talking about Chicago that's really cold. I'm not talking about you know Washington DC which is a 24 little warmer but places that are about uh, you know 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION752our - our, the temperatures that we have in the3winter here in New York. There are presumably other4cities where you may know whether or not there is a5deployment of you know heat pumps.

PHILIP SKALASKI: I can't speak to buildings
outside of the Durst Organization. We're more
tristate area and New York City centric.

CHAIRPERSON GENNARO: Right.

9

PHILIP SKALASKI: But that said, yes, heat pumps 10 11 are much easier to deploy in southern you know, 12 southern areas less you know, where we don't get into 13 you know multiple freezing days at a time below 32 14 degrees. It does get deployed but uhm, yeah, I can't 15 speak for the other climates but again, the COPs of 16 heat pumps go way down when you get below a certain 17 temperature. You need to look at the efficiency 18 curves of these issues and these units and until the 19 grid is completely green, it doesn't make sense right 20 now in some cases.

I'm not saying on you know warmer temperatures and that's why I'm looking at a hybridized option. CHAIRPERSON GENNARO: Yeah. COMMITTEE COUNSEL: Chair Gennaro, Ampry-Samuels

25 has a question.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 76
2	CHAIRPERSON GENNARO: Oh sure, yeah.
3	COMMITTEE COUNSEL: Council Member Ampry-Samuels
4	has a question.
5	CHAIRPERSON GENNARO: Yeah, I mean I'm just
6	finishing up my questions and then we'll get to her,
7	okay.
8	COMMITTEE COUNSEL: Okay.
9	CHAIRPERSON GENNARO: Yeah, okay, so let me just
10	kind of finish up here. Uh, and also Mr. Skalaski,
11	you're — you know you mentioned a lot about uh, uh,
12	you know cooking systems and like a tonnage of carbon
13	that goes up. You know, this is all in your written
14	testimony I would presume?
15	PHILIP SKALASKI: It is, yes.
16	CHAIRPERSON GENNARO: Okay, so we'll be taking a
17	close look at that. Also, you know because you're in
18	the industry, you deal with a lot of entities you
19	know, trade associations and what not. Are you
20	familiar with any trade association that represents
21	heat pumps? Is there a trade association that
22	represents that industry? I'm kind of wondering why
23	they're not here. I mean, if I were them, I would be
24	here.
25	

1COMMITTEE ON ENVIRONMENTAL PROTECTION772PHILIP SKALASKI: There are many manufacturers3out there that represent heat pumps. There are - uh,4I don't know about trade associations.

5 COMMITTEE COUNSEL: There is a trade association 6 and they're here.

7 CHAIRPERSON GENNARO: Oh, they're here. Okav, very good. Okay, so I look forward to that and then 8 9 I have my final - and Santos had to go but I do have a question for uh, Demos. Uhm, Demos, it is my 10 11 understanding you know based on conversations with 12 staff that uhm, that you know you testified against the bill upright. It's my understanding by talking 13 14 with the Mayor's Office and talking with staff that 15 uh, that bioheat blends you know greater than you 16 know 20 percent. Greater then B20, you know B30 17 would meet the current standard in the bill and if we were to have uhm, you know bioheat because it does at 18 19 higher blends B20, B30 you know meet the standard. 20 You know what would that do to your - you know if 21 that were the case, you know what would that do to your perception of this bill if bioheat were to be 2.2 23 included?

DEMOS DEMOPOULOUS: As far as we're concerned, it would be a great improvement. 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 78 2 CHAIRPERSON GENNARO: Thank you. 3 DEMOS DEMOPOULOUS: Mr. Chairman, also I think someone earlier; forgive me, I forgot his name, 4 5 testified to some degree that if biofuel was introduced, it would meet the requirements if I'm not 6 7 mistaken.

8 CHAIRPERSON GENNARO: You know certainly one of 9 the things that uhm, you know is going to be a you 10 know a debate that you know ranges between now and 11 when we come to closure on this, is you know what we 12 do with fuels like bioheat and you know so called 13 sustainable natural gas and so, you know that is 14 going to be a topic for sure. But uhm, I just want 15 to let you know that with bioheat, we've come a long 16 way with New York City on bioheat and uhm, we will 17 continue that discussion.

18 And with that Samara -

DEMOS DEMOPOULOUS: May I add one more thing?CHAIRPERSON GENNARO: Sure.

DEMOS DEMOPOULOUS: Okay, so what was just discussed about the heat pump not being efficient enough in colder temperatures, you may recall that when gas interruptible were put into a lot of the buildings. Where the building was supplied with heat

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 79 2 and hot water by gas but in a certain temperature, 3 the oil was kicked in because the gas was unable to 4 supply the heat and hot water needed in the lower 5 temperatures. So, I think when the gentleman was speaking about 6 7 that, was pretty much the same idea. 8 CHAIRPERSON GENNARO: Okay. 9 DEMOS DEMOPOULOUS: So, temperatures and when 10 that happened a few winters back, where it got 11 severely cold for a stretch of time, the oil 12 companies were unable to make the deliveries to get 13 to the buildings in time because a lot of the Super's 14 didn't rely on having the oil tank full in case there 15 was severe weather. They let them go down because 16 they were just relying on the gas but when they 17 needed the oil, they turned the switch on and it

18 wasn't there.

19

CHAIRPERSON GENNARO:

DEMOS DEMOPOULOUS: So, everybody was calling at once, so the industry handled it. We got the job done but if we're in a severe stretch of cold weather, it could be a problem for many tenants. CHAIRPERSON GENNARO: Thank you Demos, I appreciate that.

Right.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 80 2 DEMOS DEMOPOULOUS: Thank you. 3 CHAIRPERSON GENNARO: And I want to thank all the 4 members of this panel. Samara, so am I going to 5 recognize Council Member Ampry-Samuels? Should I do that now? 6 7 COMMITTEE COUNSEL: Yes, please recognize Council 8 Member Ampry-Samuels. 9 CHAIRPERSON GENNARO: Council Member Ampry-Samuels, thank you for your patience. Uh, the floor 10 11 is yours. 12 SERGEANT AT ARMS: Time starts now. 13 COUNCIL MEMBER AMPRY-SAMUELS: Thank you. At 14 this point, my sole is burning right now, right? And 15 I just want to go just, just - Demos, you just said you know you talked about folks you know with heat 16 17 and you know being cold and you know I represent the 18 highest concentration in the public housing in north 19 America and my residents are always cold, right? 20 DEMOS DEMOPOULOUS: Yes. 21 COUNCIL MEMBER AMPRY-SAMUEL: And so, if we're having this conversation, I'm trying to figure out -2.2 23 I keep hearing a no and like opposition to the bill and it's easy to say no, right? The hard part is 24 25 coming up with how do we get to a yes? What are the

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 81 2 solutions that are accurate and factual and I'm just 3 saying that because I represent a district right now and if you heard in my open testimony, you know we're 4 5 suffering here, we're dying. And so, to just talk about jobs being you know like the detrimental impact 6 7 or unintended consequences related to jobs. I**′**m talking about, you know how do I represent 8 9 communities that are dying because of unintended consequences or intended consequences of diesel buses 10 11 being sent to Brownsville in East New York, right? We don't have a good history in this city of showing 12 up for people that don't have a true voice. 13 14 And so, with my bill, I am trying to hear and 15 listen for suggestions on how do we get to a yes, 16 right? That's what I'm looking for. Not the you 17 know and thank you Santos you know for your testimony 18 but you know I heard opposition. I heard you know 19 climate change is real but you know the transition is off, the timeline is off. Okay but what part of the 20 bill and the transition would make sense for you to 21 2.2 agree to it, right? 23 So, that's where I'm coming from with this

24 conversation and then, you know Chair, I again
25 appreciate the hearing itself but I would love to see

1COMMITTEE ON ENVIRONMENTAL PROTECTION822a balance in who's testifying because that's also3helpful in being able to kind of go back and forth in4having a discussion as to one person said this and5well, this is my suggestion to what that person just6said. It's just helpful to have that type of7dialogue.

8 And one last thing. Heat pumps work in New York 9 City. I'm working with organizations that are testifying today right. They work in New York City. 10 11 They're working on heat pumps across the State of New 12 We're having conversations about the pumps York. 13 right here in Brownsville with the Nehemiah Homes and 14 so to say that they are not and that they don't work 15 is just inaccurate.

And so, I'm going to just end that there because there was a lot that was said with this panel and again, it just kicked up my blood and uhm, I just want to have a real conversation about how do we get to a yes?

21 CHAIRPERSON GENNARO: I'm going to jump in first 22 Demos. Uh, uh, first of all Council Member, we went 23 through great lengths with staff to make sure that 24 there were - and I'm not going to worry about the 25 clock right now. That there were you know that there

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 83 2 were you know panels in favor and panels that either 3 had issues or were in opposition and this is part of 4 the back and forth. And you'll see that as we roll 5 through the hearing, uhm, that's the approach that we're taking. We have people that are you know in 6 7 strongly support of. People who are against and people who have issues where if it were tweaked, it 8 9 would be better. And I'm just trying to you know listen to information. I went back to Demos and 10 11 said, hey, you know like, you were at a no and if bio was part of the equation, where would you be? 12 He said that would be better. 13 14 And so, this is I think part of the you know, 15 dynamic that we're trying to do here. You know, people have their opinions. 16 17 COUNCIL MEMBER AMPRY-SAMUELS: That was the point 18 of my statement right now. Everyone has their 19 opinions, so I just wanted to - I wanted to put it 20 into context because you know settle with something 21 but I wanted to put it in context you know where I'm 2.2 coming from to just put that out there, so that 23 hopefully the next panel - again, this is not my Committee but just hoping that the next panel will 24 have a balance, so that we're doing this -25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 84
2	CHAIRPERSON GENNARO: Yeah, well, I mean, yeah,
3	no, I mean, what we do is we normally panel like-
4	minded you know people who sort of like coming from
5	the same orbit. And so, we have like - so, the first
6	panel was very pro. You know this panel was not so
7	pro let us say and then like the next panel, they're
8	going to knock your socks off, trust me. You know
9	what I mean?
10	And so, you're going to be feeling great about
11	yourself.
12	COUNCIL MEMBER AMPRY-SAMUEL: I'm here for all.
13	I'm here for it all.
14	CHAIRPERSON GENNARO: Okay.
15	COUNCIL MEMBER AMPRY-SAMUEL: I just wanted to
16	jump in there.
17	CHAIRPERSON GENNARO: Yeah, no, this is why, this
18	is why everyone you know likes working with you. You
19	know and so, you know you just come right out with it
20	and you know it's just it's wide open throttle. And
21	so, that's great and I'll give Demos the last word on
22	this and then we can proceed to the next panel, which
23	you're going to love Council Member.
24	DEMOS DEMOPOULOUS: Yeah. Listen Chairman again,
25	I want to thank you because yes, the introduction of

1COMMITTEE ON ENVIRONMENTAL PROTECTION852the - or the more of use of biodiesel fuel will be3cleaner. Will be requirements and as far as the4buses go with diesel fuel, exhaust, that's a5maintenance issue.

A lot of these companies and maybe even the city
itself, don't maintain the buses, these lenses as
much as they should that would eliminate all that
smoking and all that diesel. There's all kinds of
things they could do but certainly besides
maintenance, the burning of the cleaner fuel will
also do it and I guarantee you that.

13 CHAIRPERSON GENNARO: Okay, thank you, thank you. 14 Okay, I think we're good to move onto the next panel. 15 Is that okay Council Member, are we good? 16 COUNCIL MEMBER AMPRY-SAMUEL: It's your show. 17 CHAIRPERSON GENNARO: No, I'm just you know, 18 you're the sponsor. I want to work with you. I'm 19 like your client, you know what I mean. I'm like -20 you know, I'm trying to bring all perspectives in and 21 like these people signed up. That's how it works. 2.2 And so, thank you very much.

23 COUNCIL MEMBER AMPRY-SAMUEL: Go to the next 24 panel.

COMMITTEE ON ENVIRONMENTAL PROTECTION 86 CHAIRPERSON GENNARO: Okay, yeah, next panel. Okay, Samara.

1

4 COMMITTEE COUNSEL: Okay, the next panel starts
5 with Zackary Steinberg from the Real Estate Board of
6 New York and he will be followed by -

7 CHAIRPERSON GENNARO: Whoa, whoa, whoa, wait a 8 minute, wait a minute. I think you're missing the 9 fourth panel that starts with WE ACT for 10 Environmental Justice.

11 COMMITTEE COUNSEL: Oh, sorry. The fourth panel, 12 excuse me. The fourth panel starts with Sonal Jessel 13 from WE ACT and also Annie Carforo from WE ACT and 14 then we have Lonnie Portis from WE ACT. Then we have 15 Pete Sikora and Rachel Rivera from New York 16 Communities for Change.

17 CHAIRPERSON GENNARO: And you know, let me just 18 jump in for a second. Uh, for just like a point of 19 order regarding Pete and Rachel. You know I read the 20 testimony that came in from Pete and uhm, he is kind of like sharing his testimony with Rachel. They're 21 kind of like doing it together. So, we're going to 2.2 23 make a little accommodation for the last two witnesses on this panel. So, like the two of them 24 25 will have four minutes combined. They're kind of

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 87 2 teaming up on their thing. It's almost like a play. 3 They have two different you know he starts, then she goes and he starts, it's all part of the same 4 5 testimony. So, we have a total of five witnesses and the 6 7 last two are sort of coupled so to speak. So, Pete and Rachel will be kind of - they're doing a four 8

9 minute thing between them, okay and I want to

10 accommodate that, okay?

11 COMMITTEE COUNSEL: Alright.

12 CHAIRPERSON GENNARO: And so, with that said, let 13 us commence.

14 COMMITTEE COUNSEL: Alright, Sonal Jessel.

15 SERGEANT AT ARMS: Time starts.

16 SONAL JESSEL: Thank you. Good afternoon, Chair 17 Gennaro. Thank you for the opportunity to testify 18 regarding Introduction 2317. And thank you Council 19 Member Ampry-Samuel for your championship of this 20 bill.

My name is Sonal, I'm the Director of Policy at WE ACT for Environmental Justice. Over the past 32 years, WE ACT has been combating environmental racism in Northern Manhattan. I am here as a co-leader of the GasFreeNYC Coalition. We are championing 1COMMITTEE ON ENVIRONMENTAL PROTECTION882Introduction 2317 because we believe it is important3to prevent future indoor and outdoor pollution that4hurts our health.

Building pollution contributes greatly to poor 5 air quality in New York City. It is communities of 6 7 color that have older, under maintained buildings that are energy inefficient, leading to more exposure 8 9 to air pollutants that hurt our health. Higher rates of buildings in communities of color and importantly, 10 11 public schools are even still using dirty fuel oil. 12 That must stop immediately. Introduction 2317 13 focuses mainly on limiting natural gas emissions. The 14 use of natural gas emits dangerous air pollutants 15 such as NOX, that directly leads to respiratory and 16 cardiovascular diseases. A 2020 report found that 17 children are at the increased risk of illness from 18 gas stove pollution and their increased risk is at 42 19 percent. We need to see the bill reduces emission limit to 20

21 25 metric tons of carbon, includes major gut 22 renovations, speeds up the timeline, and reduces 23 exemptions such as for commercial kitchens. 24 Commercial kitchens are a major source of

COMMITTEE ON ENVIRONMENTAL PROTECTION 89 2 neighborhood air pollution, one of the top source in 3 New York City.

I want to underscore that reducing greenhouse gas 4 emissions does not mean losing sight of the other co-5 pollutants that consistently plaque communities 6 7 across the city. So far, no testimonies have even touched on local air quality as a motivation for the 8 9 bill. The comments promoting hydrogen blending, biofuels, and stating gas stoves are zero emissions 10 11 is doing just that. NOX pollution from natural gas, 12 from stoves as well as SO2, PM2.5, and other 13 pollutants from energy sources, have direct 14 respiratory impacts and that needs to be centralized. 15 Additionally, we need to see leadership from our 16 city. City-owned buildings should be first in line for decarbonizing and electrifying. We must not see 17 18 big buildings such as public schools, get new gas 19 infrastructure, starting now. They must not be 20 exempted in this bill and even the biggest schools 21 right now in New York City are getting new gas 2.2 infrastructure and they are all in communities of 23 color. And that is directly related to local air pollution and health impacts. 24

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1	COMMITTEE ON ENVIRONMENTAL PROTECTION 90
2	COMMITTEE ON ENVIRONMENTAL PROTECTION 90 I'd also like to quickly rebut some of the points
3	by public testimonials stating that the grid isn't
4	ready and that heat pump technology doesn't work in
5	New York City and point to the Mayor's Office
6	statements at the beginning that say exactly the
7	opposite. So, thank you very much for your time.
8	CHAIRPERSON GENNARO: Thank you very much. I
9	appreciate your testimony and like we did with
10	previous panels; we'll wait for these; we'll wait for
11	the end of this panel and then we'll revisit the
12	entire panel with questions. Thank you very much and
13	uh, Samara, please call the next witness on this
14	panel. Samara.
15	COMMITTEE COUNSEL: The next witness is Annie
16	Carforo from WE ACT for Environmental Justice.
17	SERGEANT AT ARMS: Time starts now.
18	ANNIE CARFORO: Good afternoon Chairman Gennaro.
19	Thank you for the opportunity to testify today. My
20	name is Annie Carforo and I'm the Climate Justice
21	Organizer at WE ACT for Environmental Justice. And
22	I'm going to continue our testimony as part of the
23	Gas Free NYC Coalition in support of Introduction
24	2317. Which as someone mentioned will address local
25	

COMMITTEE ON ENVIRONMENTAL PROTECTION 91 air pollution that disproportionately harms communities of color.

4 A 2021 study confirmed that racial ethnic 5 minorities in the United States are exposed to higher PM2.5 pollution associated with residential gas 6 7 combustion. And in certain instances facing 32 8 percent higher exposure. This has led to disparate 9 health outcomes for communities of color which experience higher rates of respiratory diseases like 10 11 asthma. We must improve air quality in more vulnerable communities, especially as summer months 12 13 continue to break record highs and trigger dangerous 14 respiratory responses that lead to hospitalization 15 and premature death. There's an opportunity here to ensure that neighborhoods like Inwood, Jerome Avenue, 16 17 East New York, East Harlem, that are hit first and 18 worst by air pollution and climate change. See 19 development that is all electric and improves the air 20 quality for the residents who call these places home. 21 In the absence of global and national leadership, after the COP 26 climate summit. Local governments 2.2 23 with global influence like New York City can lead by example for cities around the world. That is why we 24

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 92
2	must pass Intro. 2317 and accelerate its
3	implementation timeline to one year after enactment.
4	A delayed timeline will lock in decades of new
5	fossil fuel infrastructure which we simply cannot
6	afford. In order to further strengthen Intro. 2317,
7	we must also lower the threshold of the air pollution
8	limit and the bill from 50 kilograms of Co2 per BTU
9	to 25 kilograms. This will prevent the use of
10	biomethane and hydrogen blends and eliminate any
11	possible loopholes in the law. We must also include
12	a clear definition for gut renovations.
13	Additional recommendations put forth by the Gas
14	Free NYC Coalition will be included in my submitted
15	written testimony, along with other partner
16	organizations. Thank you.
17	CHAIRPERSON GENNARO: Thank you very much. Thank
18	you very much and we'll come back for questions.
19	Samara.
20	COMMITTEE COUNSEL: The next witness is Lonnie
21	Portis from WE ACT for Environmental Justice.
22	SERGEANT AT ARMS: Time starts now.
23	LONNIE PORTIS: Hi, I first want to thank Chair
24	Gennaro for his leadership and dedication to
25	electrifying New York City school buses and now for
l	l

COMMITTEE ON ENVIRONMENTAL PROTECTION 93 the opportunity to testify on the matter of building electrification.

I am Lonnie Portis, the Environmental Policy and
Advocacy Coordinator at WE ACT and routinely analyze
New York City policies and programs for equity and
climate justice and support a group of community
members mobilized around environmental issues in
Northern Manhattan.

10 The bills being heard today Intro. 2317, Intro. 2091 and Intro. 2196 all move us forward in the right 11 12 direction, toward the equitable implementation of Local Law 97 and mitigating the negative 13 14 environmental health hazards caused by the use of 15 fossil fuel energy. My colleagues and Gas Free NYC 16 Coalition members have already testified on the need to pass 2317. 17

I want to add that the city needs an actionable plan for the city's existing buildings and homes. And this is why we support of Intro. 2091, mandating a comprehensive and holistic study of building electrification. The data and recommendations that would come from the study will be essential in accelerating the equitable implementation of Local

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COMMITTEE ON ENVIRONMENTAL PROTECTION 94 Law 97 with the emission reduction goals of 80 percent by 2050.

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4 We do recommend that the scope of this be widened 5 to include opportunities for and pathways to equitable electrification. Moreover, Intro. 2196's 6 7 study of the negative health impacts of gas stoves will acknowledge, on public record, the harms and 8 9 dangers associated with cooking with fossil fuels. And catalyze a plan to further protect the health and 10 11 safety of New Yorkers. Electrifying gas appliances 12 would address the 42 percent increased risk of 13 children experiencing asthma symptoms associated with gas stoves. Such indoor pollution disproportionately 14 15 affects communities of color and low-income 16 households with similar across the city.

17 This study needs to be broken down by race and 18 neighborhood to ensure environmental justice in 19 making recommendations. It is important to highlight 20 and recognize the importance of electrifying 21 buildings and homes but also remember that these efforts will happen simultaneously with a transition 2.2 23 to clean, renewable energy production, electrical grid modernization and expansion of community solar. 24 25 SERGEANT AT ARMS: Time expired.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 95 WE ACT for Environmental Justice 2 LONNIE PORTIS: 3 supports 2317, 2091 and 2196. Thank you again, Chair Gennaro and the Environmental Protection Committee. 4 5 CHAIRPERSON GENNARO: Thank you Lonnie, we'll come back with questions. Appreciate it and we had a 6 7 good time with that bus thing, that was a lot of fun, 8 yeah. 9 COMMITTEE COUNSEL: The next witness is Pete Sikora and he is going to be sharing with Rachel 10 Rivera. 11 12 SERGEANT AT ARMS: Time starts now. 13 PETE SIKORA: Thank you very much for having us. 14 My name is Pete Sikora, I'm with New York -15 CHAIRPERSON GENNARO: I just want to make sure 16 for the Sergeant to set the clock at four minutes 17 because Pete's going to be sharing his testimony with another witness. That's as per my reading of his 18 19 testimony that I got last night. And so, uhm, so we're going to do four minutes for you both combined, 20 21 okay Pete? SERGEANT AT ARMS: Yes Chair. 2.2 23 PETE SIKORA: Thanks very much Chairman Gennaro and thanks for holding this hearing. My name is Pete 24 25 Sikora, I'm with New York Communities for Change and

COMMITTEE ON ENVIRONMENTAL PROTECTION 96
 I'm with Rachel Rivera, whose also one of our member
 leaders.

4 NYCC is part of the Gas Free NYC Campaign and we 5 are not funded by the fossil fuel industry or the real estate industry unlike some of the entities that 6 7 you've heard from before. We are here to pass - to urge you to pass Intro. 2317 before the end of the 8 9 year and strengthen it, so that it takes effect in 10 one year on all building types. We also urge you to 11 include gut renovations to find us all at one, which 12 is major alterations.

13 Intro. 2317 fights climate change and creates 14 clean energy jobs and there's no time to waste here 15 in the climate crisis as you've heard. The bill 16 fights both inequality and climate change at the same 17 time. New York City faces an existential threat and 18 there's no time to delay. So, we appreciate your 19 strong focus on this.

I want to echo the administration's testimony about the real world here, which is in contrast to what I saw from the industry, which is complete this right here. All lies, all lies. Our testimony includes links to almost 80 building -

1COMMITTEE ON ENVIRONMENTAL PROTECTION972CHAIRPERSON GENNARO:I'm going to urge you to -3I would urge you to focus on the veracity of your own4testimony.

PETE SIKORA: Yeah, well, we're butting what they 5 just said, which is a whole bunch of misleading, 6 7 outright, untrue statements. I could go through them one by one but frankly, it's like playing whack em 8 9 all. None of it makes sense and the administration laid out the practicality and affordability of this 10 11 legislation as well as its feasibility and we agree 12 This should get done right now. with them.

And Rachel Rivera's story, illustrates why that's 13 the case but before we do that because I'm a little 14 15 worried about technical difficulties here. I want to 16 again point out that in the real world, heat pumps 17 are working and we've supplied you with lists of 18 almost 80 building projects that are either passive 19 house or fossil free that are large. You're going to 20 hear from a lot of experts after us, including Columbia University, Alloy, the Architects, Block 21 Power and on and on with individual experts 2.2 23 who are actually doing this work in the real world. So, we urge you to follow their advice. Pass this 24 bill right now. 25

COMMITTEE ON ENVIRONMENTAL PROTECTION And now, I'll ask Rachel to speak about her experience, which illustrates why this is so necessary.

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CHAIRPERSON GENNARO: Thank you Pete.

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RACHEL RIVERA: Hi, my name is Rachel Rivera. I
live in Brownsville. My family lost everything due
to Hurricane Sandy. Then, my family also lost
everything in Puerto Rico due to Hurricane Maria.

During Sandy, I was home at Bed Stuey, which was in a red area, a red zone. I heard a cracking noise, I went to my daughters room, took her out of the bed because I got scared. As soon as I took her out of the bed, my ceiling caved in. I lived on the last floor, so the whole roof and my ceiling caved in onto her bed. We lost everything.

17 Uh, at the time, my daughter was only six-years-18 old. Uh, we fled into the night with nothing. We 19 were in the shelter system, which was like an 20 evacuation center for people that was victims to Hurricane Sandy. Uhm, months later, Hurricane Maria 21 hit, we lost everything in Puerto Rico. The family 2.2 23 that I had living in Puerto Rico. I also lost family member, a family friend because he drown. They found 24 25 him after the flood water was receding.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 99 2 To this day, me and my daughter suffer PTSD from 3 the storms. When Hurricane Ida or Irene, Ida, hit New York again, we suffered PTSD. My daughter now is 4 5 15 going on 16 and she was scared to the point that she came out saying, "mommy, are we going to survive 6 7 this one or are we going to perish like everyone else?" 8 9 So, I am one of the victims that lived in it and I want to also thank you for passing the Local Law 10 11 97. I'm so sorry for my background noise. I'm I have to run to my daughter's 12 running outside. 13 school, so please excuse my background noise. But 14 again, thank you for passing the law 97. 15 Now it's time to pass this bill 2317. Again, 16 thank you and please do not waste time on passing 17 these laws because it reflects on our future on like 18 people like myself and my daughter and my kids. 19 Thank you again. 20 CHAIRPERSON GENNARO: Thank you. Thank you very 21 much and uhm, and no problem about the background noise. And I have some comments for the panel. 2.2 23 First, with Ms. Jessel, I thank you for you know bringing out the issue of local air quality. You 24 25 know, I knew back in 2008 when I was passing the you

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 100
2	know New York City Climate Protection Act and
3	reducing you know Co2 in the city. There is no way
4	to reduce Co2 without reducing NOX, SOX, PM10, PM2.5,
5	carbon monoxide, you know ground level ozone. All of
6	the other so called you know criteria air pollutants.
7	It is one of the main reasons why I passed that bill
8	in the first place because by regulating Co2, it gave
9	me the ability to regulate the criteria air
10	pollutants, essentially through the back door.
11	And so, that is an important point that you made
12	and I do appreciate that. Ms. Carforo, your
13	testimony was very pointed and very specific about
14	language and changes that we ought to do and I think
15	you know that kind of specificity is a model for the
16	sort of testimony that we are you know looking for.
17	Lonnie, a great friend, thank you also for being
18	very specific and Pete and Rachel, I certainly
19	appreciate and admire you know your passion, your you
20	know perseverance on making sure that we you know do
21	get a good bill done before the end of the year and
22	this is why I am doing this bill completely full-time
23	now until the end of the year.
24	So, I didn't have actual questions, I just wanted

25 to make you know comments about your testimony and

 1
 COMMITTEE ON ENVIRONMENTAL PROTECTION
 101

 2
 that it is uh, uh, certainly you know much

 3
 appreciated and we'll continue this dialogue with WE

 4
 ACT and with New York Communities for Change as we go

 5
 down the road.

And with that Samara, does anyone else have anyquestions for this panel?

COMMITTEE COUNSEL: Not right now.

9 CHAIRPERSON GENNARO: Okay, uhm, if I could 10 Samara, we've been here awhile, I did a two minute recess and I will be back inside of two minutes and 11 12 then we'll call the next panel. In the meantime, you 13 can call the names of the next panel, just to get 14 them ready and I promise to be back within 120 15 seconds in order to you know continue, okay. I just 16 need a brief recess.

17 COMMITTEE COUNSEL: Okay. The next panel is 18 Zachary Steinberg from the Real Estate Board of New 19 York, Josephine from the American Council of 20 Engineering Companies, Sara Bayer from the Magnusson 21 Architecture and Planning, Mark Ginsberg from AIA I 2.2 quess. Those are the next witnesses to testify. 23 CHAIRPERSON GENNARO: Okay Samara, I am back. Thank you everybody for the recess. Sorry to impose. 24

25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 102
2	Are we all keyed up? Samara, is the next panel ready
3	to go?
4	COMMITTEE COUNSEL: Yes, the next panel is ready
5	to go. I called them and they were - right again,
6	Zachary Steinberg from the Real Estate Board of New
7	York, Josephine Zurica from American Council of
8	Engineering Companies, Sara Bayer from Magnusson
9	Architecture and Planning, and Mark Ginsberg from
10	AIA.
11	ZACHARY STEINBERG: Should I begin?
12	CHAIRPERSON GENNARO: Is Zachary ready to go
13	Sergeant?
14	SERGEANT AT ARMS: Yes, the clock is ready to go,
15	you can begin.
16	ZACHARY STEINBERG: Thank you for the opportunity
17	to testify at today's hearing. REBNY supports the
18	goals of Intro. 2317 but believes that changes are
19	needed for the proposal to succeed. This is the case
20	because policies around building electrification and
21	the elimination of onsite fossil fuel combustion add
22	tradeoffs and raise many critical issues that need to
23	be balanced.
24	These include the ability of the electricity
25	system including generation transmission and

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 103 2 distribution to provide reliable low emission power 3 to buildings. Efficiently securing emissions reductions and allocating costs that result in the 4 5 higher cost of electricity. Unfortunately, the current proposal raises significant concerns on each 6 7 of these points. Those are explained in our written testimony. We think these risks can be mitigated by 8 9 thoughtful improvements to the bill. These improvements include the following: A phased in 10 11 effective date that better accounts for the cost and 12 effectiveness of efficient electric-based systems, 13 the realities of the electricity system, and the 14 city's need to grow our housing supply. 15 REBNY believes an appropriate phase in would be 16 2025 for buildings under three stories and single 17 family homes, 2027 for all buildings under ten

18 stores, and 2030 for buildings over ten stories. This 19 has numerous advantages. First, in requiring smaller 20 buildings to go first, it reflects the reality that 21 heat pump technology is already cost-competitive and 22 proven in these buildings.

As electric heat pump systems are less proven and more costly for taller buildings, and particularly for domestic hot water and shared dryers, this phase

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 104 2 in would give time to ensure product manufacturers 3 provide high quality cost competitive systems for these buildings. This would help to avoid buildings 4 5 utilizing inefficient electric systems, like electric resistance heating that would guickly overburden the 6 7 grid if used widely. REBNY believes that this suggested timeline will allow for more efficient and 8 9 reliable heat pumps to become more readily available for large scale buildings. 10

Second, it would align better with other aspects of State and City policy, like the Energy Code and Local Law 97 and it would give more time for onsite storage systems, like batteries which are finally on the verge of being approved to be used in buildings.

Finally, this phase in approach allows for electrification to better align with the greening of the grid, which as we talked about previously in this hearing will allow for a much more holistic approach to eliminating fossil fuel emissions.

21 We also would support the imposition of an 22 electric ready –

23 SERGEANT AT ARMS: Time expired.
24 CHAIRPERSON GENNARO: Please finish your
25 sentence.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 105
2	ZACHARY STEINBERG: We also would support the
3	imposition of an electric ready requirement on
4	buildings constructed prior to the full effective
5	date of the law, to ensure that those built in the
6	interim could be more easily converted over to
7	electric systems. And we would encourage a focus on
8	new construction, rather than major renovations of
9	existing buildings, given the many challenges that
10	arise from trying to do this.
11	CHAIRPERSON GENNARO: Thank you. Thank you,
12	thank you. I appreciate your testimony Zach. Please
13	stay on and we'll do questions at the end of the
14	panel. Samara.
15	COMMITTEE COUNSEL: Josephine Zurica.
16	SERGEANT AT ARMS: Time starts now.
17	JOSEPHINE ZURICA: Thank you Chair Gennaro and
18	members of the Committee. My name is Josephine
19	Zurica, I am a Principal at Dagher Engineering, and
20	Chair of ACEC New York's Energy Code Committee, on
21	whose behalf I am appearing today.
22	I'd like to start by saying that ACEC New York
23	supports the goals of Intro. 2317 but we do have
24	recommendations for improving the bill.
25	

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 106 2 We're in agreement that the bill should apply to 3 new buildings; however, the intent of the bill as it relates to existing buildings needs to be clearly 4 5 defined. It should reference an excepted definition from building and/or energy codes to define the 6 7 applicability of the law. Depending on the applicability of the bill, the level of challenges 8 9 and recommended timeline for application to existing buildings should be revisited. We support Intro. 10 11 2091 as a measure to study the challenges of 12 electrifying existing buildings.

13 In addition, we propose a phase in for the bill. We are concerned that the absence of a phase-in could 14 15 result in many buildings using electric resistance 16 heating rather than heat pumps, which would tax the 17 grid and result in an increase in short-term 18 emissions and operating costs. An appropriate phase-19 in we believe, would be for new construction for buildings three stories or less, residential two 20 21 years from the enactment of the bill and a later date, no sooner than 2027, for all other buildings. 2.2 23 In addition, we recommend that within two years of enactment, all new construction should be 24 25 constructed to be electrification ready. Meaning

1COMMITTEE ON ENVIRONMENTAL PROTECTION1072that the building has been built in such a way that3the conversion to all electric can be done without4major changes to the building.

5 We also recommend that the city should commission a study by an independent third party to evaluate 6 7 preparedness of the electrical transmission and distribution infrastructure and whether it can 8 9 support electrified buildings stock increases the 10 bill will cause. The study should analyze any 11 infrastructure investments that are needed along with 12 the costs of such investments.

13 SERGEANT AT ARMS: Time expired.

25

14 CHAIRPERSON GENNARO: Thank you Josephine. Did 15 that complete your statement? I can give you one 16 more sentence, if you had one more sentence to go. JOSEPHINE ZURICA: No, yup, I'm good. Thank you. 17 18 CHAIRPERSON GENNARO: Okay, thank you. Samara. 19 COMMITTEE COUNSEL: The next witness is Sara 20 Bayer from Magnusson Architecture and Planning. SERGEANT AT ARMS: Time starts now. 21 SARA BAYER: Thank you for allowing me to speak 2.2 23 in full support of Intro. 2317. My name is Sara Bayer, I'm an Associate Principal and Director of 24

Sustainability at Magnusson Architecture and

COMMITTEE ON ENVIRONMENTAL PROTECTION 108 Planning. We focus on affordable, supportive, and senior housing in the greater New York city area.

1

We are the architects for three new buildings 4 currently in construction that are all electric, and 5 another eight all electric new buildings that are in 6 7 design. This represents a total of 1,500 units, for both private and non-profit developers. Many of our 8 9 affordable and supportive housing renovations are also converting their old combustion systems for 10 11 heating, stoves, and hot water, to heat pump and all 12 electric systems.

13 The vast majority of our recently completed 14 projects have all electric heating and cooling 15 systems. Often heat pump systems do not cost much more than unhealthy and inefficient combustion 16 17 equipment and has a coefficient of performance many 18 times greater than fossil fuel equipment will ever 19 have because it does not generate heat, heat pumps 20 move heat around. We typically pair heat pump 21 systems with a building enclosure that is slightly more energy efficient than current code, which 2.2 23 greatly reduces owners operating costs and therefore from a more realistic life cycle perspective, is the 24 25 wiser choice economically.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 109
2	It is important to note that the refrigerant in
3	these systems must be managed properly to ensure
4	their high global warming potential of them are not
5	inadvertently released. If we empower building
6	owners and operators with the right tools this can be
7	done.
8	CHAIRPERSON GENNARO: Thank you very much for
9	your statement. We certainly appreciate that. Stay
10	on for questions. Samara, next witness.
11	COMMITTEE COUNSEL: The next witness is Mark
12	Ginsberg.
13	SERGEANT AT ARMS: Time starts now.
14	MARK GINSBERG: Thank you for allowing me to
15	speak in strong support of Intro. 2317, banning
16	fossil fuels in new construction. My name is Mark
17	Ginsberg, FAIA, an Architect with Curtis & Ginsberg
18	Architects in lower Manhattan, a member of the
19	American Institute of Architects, and a former
20	President of the AIA New York Chapter.
21	My practice's major area of focus is affordable,
22	sustainable housing in New York. Climate change is
23	the existential issue of our times. Some have said
24	that electrification will add cost to affordable
25	housing. It will add a little capital cost but
l	

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 110 2 significantly lower operating costs over the life of 3 the building. We have completed four multi-family Passive House projects, with two more in construction 4 5 and a number more in design. These buildings reduce energy consumption 50 to 70 percent below a code 6 7 compliant building, meeting the city's objective of 80 percent carbon reduction by 2050 now. 8 9 More importantly, our first two all-electric 10 buildings are two months away from completion, and we 11 have five more in design in three boroughs for private developers and not-for-profits. If we are 12 13 doing this now, I see no reason why others cannot. 14 These buildings will have a much lower carbon 15 footprint when they open, and in 2040, when the state has mandated a clean grid, they will be net neutral. 16 17 I would add that this legislation follows in the footsteps of 60 localities in California and the City 18 19 of Seattle. This legislation is a cost-effective and 20 21 straightforward way to move us towards the low carbon 2.2 future we need to get to as fast as possible. Thank 23 you.

24 CHAIRPERSON GENNARO: Thank you very much. I 25 appreciate all the testimony of this panel. I found 1COMMITTEE ON ENVIRONMENTAL PROTECTION1112it very specific and very helpful and I would urge3everyone on this panel to make sure that we have your4full statement in writing, so that we continue to5ponder that. And there will be ongoing discussions6between our staff and everyone on this panel and all7of the panels.

And so, I know that the Sergeant or someone had said at the outset for people who want to submit their testimony, uhm, why don't we repeat that again for the purposes of making sure that people submit us their written statements. Whoever said that I think it was the Sergeant who came on in the beginning of the testimony.

15 SERGEANT AT ARMS: Yes, so, you can send your 16 testimony to testimony@council.nyc.gov. We have a 17 slide up on the Zoom, so anybody can see it. 18 CHAIRPERSON GENNARO: Okay, thank you Sergeant 19 and with that, I thank this panel very much and I 20 want to ask Samara if there are any questions for 21 this panel from any Council Members who are in attendance? 2.2

23 COMMITTEE COUNSEL: I do not see any hands up 24 presently. No hands up.

1COMMITTEE ON ENVIRONMENTAL PROTECTION1122CHAIRPERSON GENNARO: Okay, I certainly do once3again appreciate this good panel of you know4dedicated experts and we're ready for the next panel5Samara.6COMMITTEE COUNSEL: The next panel starts with7Ben Prosky of AIA and then Darrel Zarrilli -

8 CHAIRPERSON GENNARO: Dan. Dan, Dan Zarrilli. 9 COMMITTEE COUNSEL: Uh, Dan, Daniel Zarrilli of 10 Columbia and then Keith Leonard Kinch of BlocPower 11 and then Sadiya Hogue of NYPIRG, and then Meg Ahearn 12 of NYPIRG.

CHAIRPERSON GENNARO: Okay, thank you.
 COMMITTEE COUNSEL: Starting with Ben Prosky.
 SERGEANT AT ARMS: Time starts now.

BEN PROSKY: Ben Prosky, who is Executive Director of the American Institute of Architects. And you have heard from some of our members. We represent public and private sector architects, who are passionate about building a more sustainably city.

AIA New York strongly supports overall Intro. 23 2317, which would stop new and retrofitted buildings 24 from being powered by fossil fuels. Architects, as 25 you've heard, have been designing fossil-fuel-free 1COMMITTEE ON ENVIRONMENTAL PROTECTION1132buildings in Europe, East Asia, and many other parts3of the country for years. Even in our own city, we4just heard some examples, ranging from new5construction, high-rises in Brooklyn to even NYCHA's6electrification program for existing buildings.

7 Yet, many public and private building owners in the city remain insistent on continuing fossil fuel 8 9 use. A mandate is needed to move our city towards the electrification of buildings. Eliminating fossil 10 11 fuel use in buildings and transitioning to electric power would have many positive effects. Since most 12 of New York City's carbon emissions originate from 13 14 buildings, cleaner power would mitigate climate 15 change and improve air quality. Electric power 16 provided by renewable sources such as wind, solar, 17 and geothermal is also more reliable. A few years 18 ago, our state's utility companies instituted a gas 19 moratorium, illustrating how limited supply of fossil 20 fuels can be manipulated against the public's interest. 21

Lastly, fossil fuels are incredibly dangerous. Too many New Yorkers have been killed or permanently injured from gas fires and carbon monoxide poisoning. Gas puts architects, tradespeople, firefighters, and 1COMMITTEE ON ENVIRONMENTAL PROTECTION1142others at risk, and the threat of the risk becomes3greater in violent storms that increasingly disrupt4our city's gas lines.

5 So, while this bill would cover many buildings in 6 the city, most existing buildings will not be 7 impacted by these requirements. Additional action 8 should be taken by the City Council and the DOB to 9 mandate replacement of outdated and hazardous 10 equipment -

SERGEANT AT ARMS: Time expired.

11

BEN PROSKY: And adoption of safe carbon free technology across the city. Thank you. CHAIRPERSON GENNARO: Thank you very much for your testimony, your statement. Please stay on and we'll have questions at the end of the panel.

17 COMMITTEE COUNSEL: Daniel Zarrilli.

18 SERGEANT AT ARMS: Time starts now.

DANIEL ZARRILLI: Good afternoon. It's really a pleasure to be here. I'd like to thank Chair Gennaro and all the members of the Environmental Protection Committee for this opportunity to testify in support of Intro. 2317.

My name is Daniel Zarrilli, I am the SpecialAdvisor for Climate and Sustainability at Columbia

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 115 2 University. Much has already been said about the 3 climate crisis that has already arrived on our 4 doorstep. In fact, at Columbia, we have led the way in understanding this crisis. It was our Scientists 5 at the Lamont Doherty Earth Observatory that first 6 7 coined the term 'global warming' based on the 8 observations they recorded.

9 Now, we are marshalling all of our capabilities to address this challenge. Last year, we made an 10 11 extraordinary commitment to confronting the climate crisis, creating a world-leading Columbia Climate 12 13 School, the first new school at the university in 25 years. Our commitment to this crisis shows up in our 14 15 labs and our classrooms, and we are walking the talk 16 on our campuses as well.

17 The university in recent years has dramatically 18 decreased its greenhouse gas emissions through 19 ongoing investments in renewable energy, building 20 retrofits, electric vehicles, shifts in commuter 21 behavior, and composting of organic materials. And 2.2 buildings on prior work, Columbia released in April 23 of this year our Plan2030, which is our roadmap to achieve net zero emissions by 2050 or sooner. 24

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 116
2	Most relevant to this hearing, just this past
3	September, coinciding with Climate Week, Columbia
4	University announced that it will no longer install
5	new fossil fuel connections in any new construction,
6	refresh, or renovation projects on our campuses. To
7	support this transition, we are already in the
8	process of evaluating how to fully electrify our
9	campus by replacing the onsite combustion of fossil
10	fuels with clean, renewable energy sources. This
11	work may sound challenging, yes, but it's feasible
12	and it's necessary.
13	By ending the expansion of fossil fuel
14	infrastructure on our campuses and pursuing
15	electrification, we are taking the necessary steps to
16	align the university with the goals of the Paris
17	Agreement and the city, to clean the air in our
18	surrounding communities, and the world's addiction to
19	fossil fuels. All part of our commitment to
20	empowering the next generation of climate leaders on
21	our campus.
22	SERGEANT AT ARMS: Time expired.
23	DANIEL ZARRILLI: So, we applaud the City Council
24	and Council Member Ampry-Samuel for taking on this
25	important challenge and putting forward Intro 2317.
I	I

COMMITTEE ON ENVIRONMENTAL PROTECTION 117 It's feasible, it's necessary, and this is how the city is going to achieve the its goals and avoid the worst consequences of our climate crisis. Thanks again for the chance to testify.

6 CHAIRPERSON GENNARO: Thank you Dan, appreciate
7 that and we'll come back with comments and questions.
8 COMMITTEE COUNSEL: The next witness is Keith
9 Leonard Kinch of BlocPower.

SERGEANT AT ARMS: Time starts now.

11 KEITH LEONARD KINCH: Good afternoon. My name is 12 Keith Kinch. I am the General Manager and Co-founder 13 of BlocPower. I'm in support of Intro. 2317. 14 BlocPower is a clean-tech start-up based out of 15 Brooklyn that makes buildings energy efficient 16 utilizing software to analyze, finance, and lower 17 costs for building owners. Last week, it was 18 announced that BlocPower will be helping the city 19 Ithaca remove every building off fossil fuels. As we 20 think about where we are now in this city, we've 21 still got health and economic crisis, the question we 2.2 have to ask ourselves is how do we plan to move New 23 York City forward? How do we make sure we move forward health wise and economic wise? 24

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 118 2 And quite simply, the answer is not putting gas 3 in the buildings. The issue is around first health, health across the board for all New Yorkers but more 4 importantly health for New Yorkers in low to moderate 5 income communities, especially children and those 6 7 seniors that have asthma or other issues with their 8 air quality. When we think about this conversation 9 about why we're moving from one type of entry to another, it's not new. There was a time long ago 10 11 where people argued over wood chips over oil. People 12 like putting their hands over the fire but not using 13 oil and it worked. And you know what we did? We made billions of dollars in investment in oil and we 14 15 came up with wood chips. Then we had the same 16 conversation a couple days later, gas to oil. How 17 would it work? How would we put gas into a building 18 like oil, we like to see oil go in the building. You 19 know what we did? We made billions of dollars of 20 investment and we built gas lines and pipelines and 21 now we have gas and oil in our buildings. Now, we're having the same conversation with all electricity. 2.2 23 The answer is still the same. We need to make billions of dollars of investments, private and 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 119 2 public sector to make sure our grid is renewable and 3 to make sure the air is clean in our buildings. 4 Now, this isn't an idea that was made up 5 yesterday. The idea of pumps not working is not real. Right now, as I am talking to you, BlocPower 6 7 is installing heat pumps in Brooklyn, Queens, 8 Manhattan, the Bronx. For those who are in Queens, 9 Council Member Gennaro and others, there's a veteran's post in Queens that is currently working to 10 11 install heat pumps in their building. I'm pretty sure we don't tell our veterans, hey, we don't want 12 13 you to have clean air. Please have natural gas all 14 the time you serve this country and move forward. 15 And we can set up a visit for you to see that. 16 SERGEANT AT ARMS: Time expired. 17 KEITH LEONARD KINCH: And my last point is that -18 and my last point is very briefly. 19 CHAIRPERSON GENNARO: Make your last point 20 please, please, please. 21 KEITH LEONARD KINCH: I thank you for your time sir. I think to the other panelists points, you've 2.2 23 done a great job in your entire career even before the Council on work like this, so I'm happy that you 24 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 120 2 took time to do this and happy that you work with 3 Council Member Ampry-Samuels. I appreciate it. CHAIRPERSON GENNARO: Oh, of course, of course, 4 5 thank you. KEITH LEONARD KINCH: You're welcome. 6 7 COMMITTEE COUNSEL: The next witness is Sadiya 8 Hoque from NYPIRG. 9 SERGEANT AT ARMS: Time starts now. SADIYA HOGUE: Good afternoon. My name is Sadiya 10 11 Hoque, and I am the Chairperson of the Board of 12 Directors for NYPIRG and a CUNY Brooklyn College student studying biology and biochemistry. Thank you 13 14 Committee Chair Gennaro for the opportunity to 15 testify. 16 The need to pass Intro. 2317 is urgent. We 17 already seen extreme weather in New York City from 18 climate change. Reports regularly come out warning 19 that if we don't take immediate and dramatic climate action things will only get worse. 20 21 Yet, the Glasgow Climate Summit has ended with reviews including weak and falling far short of what 2.2 23 scientists say is needed. New York City's leadership on climate change can shape U.S. policy. And now it 24 25 must, we're depending our futures on it. The policy

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 121 2 decisions made by the New York City Council now will 3 impact my future more than my parent's, or yours. Intro. 2317 will combat climate change, cut deadly 4 air pollution, reduce gas explosions, and promote 5 environmental justice. Burning fossil fuels for heat 6 7 and hot water in New York City buildings contributes to poor air quality and over 1,000 premature deaths 8 9 every year, particularly among communities of color.

By stopping new gas infrastructure from being 10 11 built, Intro. 2317 will prevent millions of metric 12 tons of climate pollution from heating the climate and making people sick. Shifting New York City's 13 14 buildings away from fossil fuels will also reduce the 15 risks of deadly gas explosions. Gas explosions in the Bronx, Harlem and the East Village over the past 16 17 few years have been deadly, destroying whole 18 buildings and displacing dozens of families.

We believe the bill can be made stronger in two specific ways. This bill has a two year enactment for new buildings and gut renovations. We believe that's too slow and enactment should be changed to one year after passage. We also urge you to amend the bill so that it clearly covers gut renovations

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 122 2 just like with new buildings, that's the best moment 3 to go fossil free. The fact that the world's leaders are falling 4 5 short on climate action is even more reason for New York City to lead the charge. Please pass Intro. 2317 6 7 without delay. 8 SERGEANT AT ARMS: Time expired. 9 SADIYA HOGUE: Thank you. 10 CHAIRPERSON GENNARO: Thank you very much. Ι 11 appreciate your testimony. 12 COMMITTEE COUNSEL: New York Public Interest 13 Research Group. 14 CHAIRPERSON GENNARO: Meg? Meg? 15 MEG AHEARN: I'm on mute. Oh hi. Thank you. Ηi 16 everyone, my name is Megan Ahearn I'm NYPIRG's 17 Program Director. And just to follow up on Sadiya's 18 testimony, I just want to underline two points. 19 Which are the specific changes we think need to be made to the bill before passage. 20 21 Just to move from a two year after passage enactment to one year and uhm, sorry - I just lost my 2.2 23 place for a moment. Uhm, there we go. So, uhm, as we're hearing today there are already 24 - we think it's practical and possible and affordable 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION1232to move from two years to one year because as we're3hearing today from expert after expert, there are4already fossil free buildings and projects in New5York City of all sizes and types. From skyscrapers6to low-income housing being developed in built all-7electric.

And NYSERDA is showing through their bids that 8 9 construction costs, counting subsidies for projects have now effectively equalized costs. And thanks to 10 11 high energy efficiency in these new projects, people pay lower utility bills. Uhm, we also urge you to 12 13 amend the bill, so that it clearly covers gut renovations rather than uhm, the definition that's 14 15 currently in the bill for major renovations. This is 16 the perfect time to go gas free when everything but 17 the shells and joists are replaced, just like as for 18 new buildings. And there's a longer list of changes 19 to the bill that we think would be really smart to 20 make in our written testimony, which we're submitting 21 now.

I just want to also underline that the cost of not passing Intro. 2317, what are they? Super Storm Sandy caused \$19 billion in damages to New York City and damaged over 300,000 housing units from flooding. COMMITTEE ON ENVIRONMENTAL PROTECTION 124 SERGEANT AT ARMS: Time expired.

3 CHAIRPERSON GENNARO: Please finish your4 sentence, please.

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MEG AHEARN: Sorry. Uhm, thank you and after 5 Hurricane Ida, the MTA alone estimated \$100 million 6 7 in damages from the storm. Deterring air quality is 8 resulting in most costly emergency room visits, 9 illnesses and deaths and heat and frequent severe weather will increase demands placed on the city's 10 11 infrastructure from damage to our mass transit system 12 to sewage overflows from increased precipitation.

So, please pass Intro. 2317 without delay.Thanks so much.

15 CHAIRPERSON GENNARO: Thank you. Thank you. 16 Regarding this good panel, I you know long work with NYPIRG for you know many, many years and you know Dan 17 18 and I go way back. I want to you know thank Dan for 19 his partnership over the years. You know early in 20 Mayor Bloomberg's tenure; you created the you know New York City panel on climate change for a limited 21 2.2 scope of work that was going to look at city 23 infrastructure. It came in through existence, did its job, went out of existence. And I thought it was 24 wise to kind of bring that you know panel back to put 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 125 2 that in law and to widen its scope from just city 3 infrastructure to communities across the city that 4 were suffering from you know climate injustice. And you know, Dan was a big part of us figuring out what 5 the New York City on climate change was going to be 6 7 in that bill and so, I want to take this opportunity 8 to give a public shout out to Dan for you know all he 9 did for the city when he was working and all of his partnership with me. 10

11 And you know, regarding everyone else on the 12 panel, Ben, Dan, Keith, Sadiya and Meg, I appreciate 13 your testimony and as Meg just said, she is going to 14 be you know submitting her testimony in writing and I 15 hope everyone else does that. And with that said, I 16 am grateful that this panel has shared the benefit of 17 its good views with us. And I'm ready for the next 18 panel if there are no questions Samara.

19 COMMITTEE COUNSEL: I don't see any questions.
20 So, the next panel is Rocco Lacertosa from the New
21 York State Energy Coalition and Michael Trunzo from
22 the National Biodiesel Board.

CHAIRPERSON GENNARO: I've got Floyd Vergara and Steven Dodge of the National Biodiesel Board as well.
Are they not testifying? 1COMMITTEE ON ENVIRONMENTAL PROTECTION1262COMMITTEE COUNSEL: They are not testifying.3CHAIRPERSON GENNARO: Okay, fine, okay, let's do4it.

5 ROCCO LACERTOSA: Thank you Chairman Gennaro and
6 the rest of the Committee Members for the opportunity
7 to testify before you today.

My name is Rocco J. Lacertosa and I serve as the 8 9 Chief Executive Officer of the New York State Energy 10 Coalition, NYSEC. NYSEC serves as the voice of the 11 renewable biodiesel and heating oil industry in New York City and Long Island. Today, I would like to 12 13 focus my testimony on Intro. 2317, sponsored by 14 Council Member Ampry-Samuel. Since 2012, NYSEC has 15 worked tirelessly with our state and local partners to ensure a cleaner and more renewable liquid fuel 16 17 was being used in buildings throughout New York City 18 and state.

Beginning with the Bloomberg Administration, we have worked to phase out 30 fuels in New York City with the goal of having all heating oil at a B20 or 20 percent or higher level by 2034. In order to achieve this goal, the biofuel industry has invested tens of millions of dollars in infrastructure in New York to ensure that there's a larger and more 1COMMITTEE ON ENVIRONMENTAL PROTECTION1272accessible supply of biodiesel for New York3customers.

Next year will mark ten years since we set out to create a cleaner and more sustainable heating fuel and I'm pleased to say that those efforts have resulted in the removal of millions of gallons of petroleum from the market or the equivalent of over 500,000 cars being taken off the road.

10 It is this success that makes us excited for the future of biofuel in New York and the reasons some of 11 12 our members have strived beyond the B20 target. In 13 fact, some of our members have recently begun 14 supplying B50 to their customers. With regard to 15 Intro. 2317, we are deeply concerned about the 16 potential impact this legislation could have, not 17 only on the biofuel industry in New York City but the 18 city's fuel diversity.

Again, let me say that again. The city's fuel diversity. What worries us more, however, is the chilling effect that this will have on the biofuel industry and the signal it sends about the value of future investment. We are committed to getting to higher blends of biodiesel. We cannot do this without future investment. We look forward to

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 128 2 discussing this further with the Council. Thank you 3 for your time today. 4 COMMITTEE COUNSEL: Thank you. And our next 5 witness is -CHAIRPERSON GENNARO: Thank you Rocco. 6 7 ROCCO LACERTOSA: You're welcome. COMMITTEE COUNSEL: Michael Trunzo of the 8 9 National Biodiesel Board. SERGEANT AT ARMS: Time starts now. 10 MICHAEL TRUNZO: Good afternoon. I'm Michael 11 12 Trunzo. Can you hear me okay? 13 CHAIRPERSON GENNARO: Yeah, I got you. 14 MICHAEL TRUNZO: Okay, Michael Trunzo with 15 Shenker Russo & Clark. Our firm represents the 16 National Biodiesel Board. The trade association of 17 domestic producers of biodiesel, renewable diesel and sustainable aviation fuel. 18 19 The National Biodiesel Board joins the City Council in their efforts to reduce carbon emissions 20 and phase out the use of fossil fuels. Dating back 21 to 2010, we've worked with the City Council in 2.2 23 passing statutes to implement the replacement of heating oil with 20 percent biodiesel blends by 2034. 24 25 This year, we successfully worked with the state

1COMMITTEE ON ENVIRONMENTAL PROTECTION1292legislature to move that 20 percent blending level3statewide by 2030 four years earlier. That bill is4awaiting Governor Hochul's signature.

New York State consumes one billions gallons of 5 heating annually. These laws will result in the 6 7 displacement of 200 million gallons of heating oil used in the state. Our goal is to replace 500 8 9 million gallons by 2035 with the B50 requirement and all one billion gallons by 2050 with 100 percent 10 biodiesel renewable diesel. The full lifecycle 11 analysis will show a 73 to 80 percent reduction in 12 13 greenhouse gas emissions when using biomass based 14 diesel versus petroleum diesel. These carbon savings 15 are immediate and provide health benefits that will 16 lower cancer rates and instances of asthma. Our 17 testimony will include a study with those findings. Relative to Intro. 2317 does not take into 18

19 consideration a full life cycle analysis but only 20 tailpipe stack emissions. We would suggest that the 21 bill be amended to include the word fossil before 22 carbon dioxide in the sentence amidst 50 kilograms or 23 more of carbon dioxide. This will allow the use of 24 clean burning biodiesel and renewable diesel to

1COMMITTEE ON ENVIRONMENTAL PROTECTION1302continue to help contribute to the lowering of fossil3emissions in the state.

4 Our testimony will not dissuade you from the goal
5 of electrification -

SERGEANT AT ARMS: Time expired.

6

7 CHAIRPERSON GENNARO: Please finish your 8 sentence.

9 MICHAEL TRUNZO: Yup, our testimony is not to 10 dissuade you from the goal of electrification but to 11 speak to the immediate savings on how biodiesel and 12 renewable diesel can help achieve carbon reduction 13 goals with little or no cost to consumers, nor the 14 need for new appliances in their homes. Thank you 15 very much.

16 CHAIRPERSON GENNARO: Thank you to you both. Ι 17 have a long history with you know trying to advance 18 you know biodiesel and - or you know bioheat in New 19 York City, just as the administration has done with 20 you know biodiesel in its fleets and heavy duty 21 vehicles and uhm, you know the cleaner savings that have been able to you know realized in New York City 2.2 23 should be dually noted. And I look forward to that whole lifecycle analysis that you are discussing that 24 of course would relate to you know the enemy so to 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION1312speak is when we have you know transferred uh, you3know carbon that was deep in the earth and made a net4transfer of carbon you know to the atmosphere of5fossil fuels.

But when you're dealing with a bio product, a 6 7 plant basically, you know during its lifecycle it will pick up Co2 and then if it is you know combusted 8 9 or just left to decompose that Co2 will return to the atmosphere. So, not all Co2 is created equal. 10 Ι 11 think that's what you're getting at with that lifecycle analysis. We look forward to that and we 12 13 look forward to an ongoing conversation with the 14 National Biodiesel Board nationally and with Rocco 15 and his partners locally as we move forward.

And so, that concludes my comments for this panel and if there are no questions for this panel, we can move on to the next panel.

19 COMMITTEE COUNSEL: The next panel begins with 20 Corey Letcher from the New York Energy Consumer 21 Council. Corey.

22 CHAIRPERSON GENNARO: Why don't we call the whole 23 panel okay.

24 COMMITTEE COUNSEL: Okay and Diana Sweeney from 25 the New York City Energy Consumers Council, John Rice

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 132 2 from the New York City Energy Consumers Council, 3 Wendy Hijos from Consumers Energy Alliance and Lauren 4 Moss from the New York Energy Consumers Council. 5 CHAIRPERSON GENNARO: Thank you Samara. SERGEANT AT ARMS: Time starts now. 6 7 COREY LETCHER: Alright, so good afternoon. 8 Thank you for having us for this hearing today. 9 CHAIRPERSON GENNARO: Thank you. COREY LETCHER: My name is Corey Letcher from the 10 11 Energy Consumers Council in New York. We are 12 supportive of the bill and the spirit. We believe there is some significant changes we would like to 13 recommend. One of the concerns that we have is the 14 15 impact this legislation is going to have on the 16 current electric grid as it states today with the 17 phase out of gas and other fossil fuels that this 18 bill aims to achieve. Electric options are going to 19 be needed to replace these fuels. This in turn will increase the demand and the 20 21 stress on the current electric grid. Given these implications to the electric grid, we would like to 2.2 23 propose that the utilities, namely locally here Consolidated Edison should be directed to 24 25 commissioner study by an independent third party to

1COMMITTEE ON ENVIRONMENTAL PROTECTION1332evaluate the current procured ness of the electrical3transmission and distribution infrastructure4throughout the impacted service territory, so that we5can determine whether the grid can currently support6electrified building stock under the specified7timeline that is outlined by the bill.

This study should analyze whether there are any 8 9 additional infrastructure investments that are needed along with the cost of such investments and how these 10 11 costs will be allocated. This study should also be made publicly available for review and public 12 13 comment. The necessary infrastructure upgrade 14 project timeline should also be made public so that 15 it can assist with proper planning by developers.

The effective timing of the fossil fuel ban 16 17 should track the timing of the completion of such 18 infrastructure projects. This is aligned with Intro. 19 Number 2091, which calls for the assessment of 20 possible timeframes for the electrification of 21 existing buildings of various types and sizes. This 2.2 is a study that we will propose should include the 23 impact of newly developed electrified building stock. Thank you Chairperson Gennaro and Committee Members 24

1COMMITTEE ON ENVIRONMENTAL PROTECTION1342for giving me this opportunity to testify and for3addressing this important issue.

4 CHAIRPERSON GENNARO: Thank you. Thank you very 5 much.

COMMITTEE COUNSEL: Diana Sweeney.
SERGEANT AT ARMS: Time starts now.
DIANA SWEENEY: Good afternoon. Hi, I'm Diana
Sweeney, President of Energy Watch and also the
Executive Director of the New York Energy Consumers
Council.

12 We are supportive of the bill; however, we do recommend the following six amendments to the bill. 13 14 One, with regard to the bill applying to buildings 15 underlying renovations, there should be clarity as to what type of renovations would trigger compliance 16 17 with the bill. The clarity is needed because of 18 small renovations that are unrelated to systems that 19 consume fossil fuels would trigger compliance. That 20 could present an economic hardship to many buildings. We propose if the bill would apply to buildings that 21 undergo renovations that have a value of over 50 2.2 23 percent of the property value.

24 Second, we believe there should be language added 25 to allow for an exemption in the event consolidated

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 135 2 Edison cannot cost effectively provide electrical 3 service to a new building. Third, with regard to the undo hardship exemption, there should be an 4 explicitly defined process with guidelines in order 5 to claim this exemption. Fourth, New York City owned 6 7 buildings should also be included in the bill as required to comply to lead by example. Fifth, stand 8 9 by generators used for curtailment activities, which bolster the grid resiliency should be exempted. 10

11 And finally, nothing should prevent a newly constructed building from connecting to a district 12 heating and/or cooling system including Con Edison's 13 14 District steam utility. Part of the bill prohibited 15 emissions are those due to combustion with "within a 16 building." When a building utilizes the district 17 steam system combustion is offsite. We would like to 18 clarify that a building will have the option to 19 utilize district steam as a thermal energy source. 20 Thank you Chairperson Gennaro and Committee Members 21 for giving us this opportunity to testify and for 2.2 addressing this important issue. We are very willing 23 to work with you further to further finalize the bill. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 136 2 CHAIRPERSON GENNARO: Thank you. Thank you. 3 Thank you very much, I appreciate that. COMMITTEE COUNSEL: The next panelist is John 4 5 Rice from the New York City Energy Consumers Council. JOHN RICE: Good afternoon everyone. Chair 6 7 Gennaro, Councilman Ampry-Samuel and Moderator I am John Rice, I am the President and 8 Samara. 9 Principal of Legacy Engineers, New York City's free mere Black owned consulting engineering firm. 10 I'm a Board Member of the Urban Green Council I'm a member 11 12 of the Energy Consumers Council. 13 Part of this question may have been answered I believe I heard that when Councilman 14 earlier. 15 Ampry-Samuel spoke, that she said this legislation 16 was for new buildings and gut renovations. I am here 17 in favor of; we're supportive of the bill and we're 18 here in favor of a phase in approach, similar to what 19 Chris Halfnight presented earlier in his testimony. The most efficient technologies for buildings 20 today are heat pump units, air source heat pump 21 units, which require significant roof space. For 2.2 existing high-rise buildings, due to the limitation 23 of the building footprint, the roof setbacks are 24 typically not large enough to accommodate the 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 137 necessary equipment on the roof. Therefore, without a phase in, many buildings are opting to go just with strict electric resistant heat rather than heat pumps, which would actually increase emissions, given the inefficiencies of those systems.

7 Thus, we would propose a phase in approach over 8 time based on the square footage and/or the building 9 height to provide more time for products to come 10 online that can meet the needs of all segments of the 11 building stock. As an example for buildings that are 50,000 square feet, three feet or less a two year 12 13 phase in for buildings that are 500 square feet. Ten 14 stories or less, five years and for buildings that 15 are - and all other buildings, an eight year phase in approach. I thank you for your time today. 16 17 CHAIRPERSON GENNARO: Thank you very much. 18 COMMITTEE COUNSEL: The next witness is Wendy 19 Hijos from the Consumers Energy Alliance. 20 SERGEANT AT ARMS: Time starts now. 21 WENDY HIJOS: Thank you. Good day Chief Gennaro and Members of the Environmental Protection 2.2 23 Committee. My name is Wendy Hijos and I'm the New York Executive Director for the Consumer Energy 24 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION1382Alliance. I appreciate the opportunity to share our3comments today.

Founded in 2006, CEA is a nonpartisan, nonprofit 4 organization with more than 350 member companies and 5 more than 550,000 individuals in our nationwide 6 7 network. Our mission is to help ensure American families and businesses have access to reliable, 8 9 affordable, and environmentally sound resources. We believe in an environmentally sustainable energy 10 future that includes both traditional and renewable 11 12 resources that create the energy mix to meet the 13 needs of our nation's families, businesses, 14 environment, and economy. We support U.S. energy in 15 all forms so we can continue to meet our climate 16 expectations, continue progress toward net-zero, and 17 maintain our energy security while keeping the cost 18 and reliability needs of families and businesses in 19 mind. As the Committee considers its legislative agenda 20 21 today, it is important to highlight New York's

incredible environmental progress while natural gas use and infrastructure have expanded across the state. According to state data, total emissions from the electricity generation sector fell 42 percent,

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 139 2 while natural gas use for power generation increased 3 more than 150 percent from 1990 to 2015. 4 Additionally, the Department of Energy reports that New York's energy-related carbon dioxide emissions 5 decreased a remarkable 18 percent from 1990 to 2018. 6 7 CEA is concerned about the harmful economic impacts that the suite of bills being considered 8 9 today could have on working families, small businesses, and those struggling to get by, 10 11 especially with today's inflationary environment and 12 soaring energy prices. The latest Department of Energy Winter Outlook projects with 30 percent 13 14 increases in natural gas prices, 54 percent spikes 15 for propane, 43 percent surge for home heating oil, 16 and winter gas heating bills could be \$746 and \$1,268 17 for electric heating. 18 SERGEANT AT ARMS: Time expired. 19 CHAIRPERSON GENNARO: Please finish your sentence 20 please. 21 WENDY HIJOS: CEA recently issued a Heat or Eat Report that found that consumers would pay over \$13.6 2.2 23 billion in additional higher winter energy costs as a result. I do have a few more sentences. It will 24 probably take me about 15 more seconds to finish. 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 140 2 CHAIRPERSON GENNARO: Please be brief. 3 WENDY HIJOS: Okay. These excessively high and unnecessary costs have real-life impacts for those 4 5 living at or near the poverty line, and in September of this year, the New York City region's unemployment 6 7 rate was twice the national average. This is why CEA shares its concerns with the suite of bills being 8 9 considered because they could potentially lead to higher energy costs and reduce consumer choices. 10 11 Thank you so much for your time. 12 CHAIRPERSON GENNARO: Thank you. Thank you very 13 much. 14 COMMITTEE COUNSEL: The next witness is Lauren 15 Moss of the New York Energy Consumers Council. 16 SERGEANT AT ARMS: Time starts now. 17 LAUREN MOSS: Good afternoon. I am currently the 18 Senior Vice President of the Center for Active Design 19 and also Board Member of the New York Energy Consumer Council. 20 21 We are supportive of the spirit of the bill; however, I believe that significant changes are 2.2 23 needed. A case study was performed on an existing NYCC members multi-tenanted residential building to 24 review the impacts of eliminating natural gas 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 141 combustion if the legislation had been implemented as it currently is written at the time that the land was developed.

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The study was performed on a recently constructed 5 560,000 square foot multi-family residential building 6 7 built in 2019. It currently has a natural gas fire 8 condensing hydronic heating system. The findings, 9 which are rough estimates are summarized below: The 10 installation of electrified heating systems would have resulted in an increase in first costs of about 11 \$4.5 million or \$8 a square foot; Annual operating 12 13 costs would increase by \$75,000; the loss in annual revenue of \$120,000 consisting of \$100,000 in loss 14 rent from a reduction in views associated with the 15 16 exterior mechanical equipment placed on roof 17 setbacks, as well as \$20,000 in loss amenity fees due 18 to reduction in outdoor terrace amenity space.

And the initial carbon savings from electrifying the heating systems vary between 250 and 300 tons of carbon per year, depending on whether E-Grid or Local Law 97 coefficients are used.

The impact on the cost of new development of a large building further supports the NYCC's position that large buildings, over 500,000 square feet should 1COMMITTEE ON ENVIRONMENTAL PROTECTION1422be phased in over eight years following completion of3necessary infrastructure upgrades. This will allow4time for new technologies to enter the market, which5would make the cost of development more feasible.

6 This will also avoid many buildings installing 7 electric residence heating rather than heat pumps, 8 which would actually increase emissions given the 9 inefficiencies of these systems.

10 Thank you Chairperson Gennaro and Committee
11 Members for giving me this opportunity to testify and
12 for addressing these important issues.

13 CHAIRPERSON GENNARO: Thank you very much Lauren 14 and I thank this entire panel. As I'm urging all 15 panels you know, make sure that we have all of your 16 testimony in writing. This is what I do for fun 17 every testimony and then I make little lines and 18 circles and then I bother staff and this is what I 19 do.

Yeah, you know, it's my life. What can I tell you? And so, uhm, make sure we have all that. I would like to thank this panel again for giving very specific testimony on what you know you would do to make revisions to the bill.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 143 2 This is always the kind of specificity that we're 3 looking for. I ask that you send this along. And I want to make sure from the Sergeant that I will have 4 the ability to actually watch the hearing again? 5 Will I have that ability Sergeant? Can I have a tape 6 of this? 7 SERGEANT AT ARMS: Yes, once it's applied to the 8 9 Council website, you can watch it there. 10 CHAIRPERSON GENNARO: Okay, I would ask my 11 Legislative Director to be in touch with the Council 12 and that will be available because I will be watching 13 this again as well as looking through all the 14 testimony. 15 So, I thank this panel and if there are no 16 questions, uhm, we can move onto the next panel. Are 17 there any other questions for this panel Samara? 18 COMMITTEE COUNSEL: I don't see any Councilperson 19 questions or any other questions. 20 CHAIRPERSON GENNARO: Okay, now, let me just jump 21 in right now for the sake of balance. You know the next panel to testify was going to be panel number 2.2 23 nine. We're going to you know with my apologies, go to panel number ten first for the sake of sort of 24 25 balance. You know we've had a couple panels in a row

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 144 2 that have had a certain perspective and so, I think 3 for the sake of balance, we're going to do panel ten 4 and then follow that with panel nine. My apologies 5 to panel nine as I was talking to Council Member Ampry-Samuel before, it's very important that 6 7 balance. Some people think this way. Some people think the other way. And so, we're going to you know 8 9 put panel ten before panel nine, okay? You got that 10 Samara? 11 COMMITTEE COUNSEL: Okay. 12 CHAIRPERSON GENNARO: So, we'll do that. 13 COMMITTEE COUNSEL: Panel ten, Eric Weltman of 14 Food and Water Watch, Jon Pope General Contractor, AJ 15 Pires President of Alloy , Amy Turner of Columbia 16 University Sabin Center for Climate Change Law, and 17 Leah Stokes of the University of California at Santa Barbara. 18 19 SERGEANT AT ARMS: Time starts now. 20 ERIC WELTMAN: My name is Eric Weltman, and I'm a 21 Brooklyn-Based Senior Organizer with Food and Water Watch, a member of the GasFreeNYC Coalition. 2.2 23 On behalf of Food and Water Watch's nearly 100,000 supporters in New York City, we urge the City 24 25 Council to pass Intro. 2317 now. Seven years ago,

1COMMITTEE ON ENVIRONMENTAL PROTECTION1452New York declared a ban on fracking, striking a blow3against the fossil fuel industry. It was a necessary4measure to protect our water, communities, and5environment from this dangerous drilling process.6And Chairman Gennaro, you played an important role in7that effort, for which we are grateful.

8 Since then, we've continued the fight to move New 9 York off fossil fuels, with Governor Hochul taking a major step forward by blocking fracked gas power 10 11 plants in Queens and the Hudson Valley. Now New York City must continue to lead the way by banning gas 12 hookups in new construction and gut renovations. 13 14 This policy is folks, this policy is bold, practical, 15 and necessary. The evidence on the ground is clear. 16 We have the technology, and we have the skills to use 17 it. Now, we just need the Council's leadership. Of course, ExxonMobil is scared of this 18 19 legislation. And they should be. What happens in 20 New York doesn't stay in New York. We fully expect that New York's leadership, your leadership, will be 21 emulated and let's be clear, we need it to be. 2.2 The 23 stakes could not be any higher. Hurricane Ida was another tragic reminder that the painful impacts of 24

climate change are already hitting home. More

1COMMITTEE ON ENVIRONMENTAL PROTECTION1462extreme weather events supercharged by climate3change, as well as deadly heat waves, will continue4to devastate our communities. Any delay, any delay5in moving off fossil fuels means more death and6destruction.

To be blunt folks, delay equals death. New York
City would reap a multitude of benefits from Intro.
2317. Good green jobs, cleaner air, and improved
public safety. Firefighters and other first
responders are on the frontlines of disasters –
SERGEANT AT ARMS: Time expired.

ERIC WELTMAN: Caused by gas in our buildings or made even more deadly and dangerous by its presence. Google New York City gas explosions and you'll know what I mean.

Finally, finally, we join New York Communities for Change and other allies in the GasFreeNYC campaign in calling for Intro. 2317 to be strengthened. Let me just quickly note for example – CHAIRPERSON GENNARO: Please conclude, please conclude.

23 ERIC WELTMAN: In just one year and by amending 24 the bill so that it clarifies the definition of gut

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 147 2 renovations. Thank you and again, we urge you to 3 pass this bill without further delay. 4 CHAIREPRSON GENNARO: Thank you Eric, appreciate 5 that. COMMITTEE COUNSEL: The next one is Jon Pope, 6 7 General Contractor. 8 SERGEANT AT ARMS: Time starts now. 9 JON POPE: Hi everybody, my name is Jon Pop. How are you all today? Thank you for having this 10 11 hearing. I am here to be in full support of 2317. I'm probably the illusive, small business owners, 12 general contractor here and I do not build entire 13 14 buildings but I do do all one gut renovations with 15 some regularity and I'm here in full support of this. 16 While we have these buildings opened up, let's get 17 them sealed up and let's get them electrified. 18 I don't see the logic in the cart before the 19 I think that as we go forward, we have to do horse. 20 quite a few things simultaneously. So, waiting for 21 the grid to do this, you know we're just going to end up like many have said before you know with a bunch 2.2 23 of stranded assets and that's unfortunate. I heard an earlier speaker talk about pinning the threshold 24 for getting to this bill for the gut renovations at 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 148 2 50 percent of the cost and I don't think that's 3 feasible. Because I think it's going to be a lot of hocus pocus and I think we should clearly define what 4 5 gut renovation is. I'm ready to go. My guys are ready to go. And I thank you very much for your 6 7 time. 8 CHAIRPERSON GENNARO: Thank you. Thank you for 9 your spirited testimony. I appreciate that and we love to hear from small business owners. 10 11 COMMITTEE COUNSEL: The next witness AJ Pires, 12 President of Alloy. 13 SERGEANT AT ARMS: Time starts now. 14 AJ PIRES: Thank you Chair Gennaro and the 15 Committee for holding this important hearing today 16 and for Council Member Ampry-Samuel and others for 17 sponsoring this bill. My name is AJ Pires and I'm the President of 18 19 Alloy Development, an architecture and development 20 company based in Brooklyn. I'm here today as a licensed architect and an owner of a real estate 21 development company to express my strong support for 2.2 23 banning new natural gas connections in New York. Designing and building fossil fuel free buildings 24 25 in New York is possible today and cost effective.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 149 2 My company, Alloy Development, is building the first 3 all-electric skyscraper in New York City at 100 Flatbush in Downtown Brooklyn. The building will be 4 44-stories tall and contain 440 units of market rate 5 and affordable housing and retail. It will rely on 6 7 off-the-shelf technologies that are widely available to heat and cool the building and provide hot water. 8 9 These include water source heat pumps, electric boilers and hot water heaters, induction cooktops and 10 11 heat pump dryers. And will do so to similar costs as 12 a conventional buildings.

When its operational in 2024, it will be 20 13 14 percent more efficient than a conventional new 15 building, and by 2030, we're relying on the electrical grid's transition to renewable energy. 16 Ιt 17 will be 200 percent more efficient. It will have 18 superior indoor air quality, an air-tight building 19 envelope, and most-importantly, it will be future 20 proofed, that is designed to operate in the carbon-21 free future we must start planning to live within. 2.2 Installing a natural gas system today is a bit

23 like installing copper telephone lines. The reality 24 is like steam and fuel before gas infrastructure is 25 now approaching the end of its useful life. Banning

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 150
2	new natural gas connections will not only
3	significantly reduce carbon emissions and improve air
4	quality, it will also make New York a leader in
5	sustainable development nationally and
6	internationally. There are many problems related to
7	the climate that we don't yet have solutions for.
8	How to make low-carbon steel or low-carbon jet fuel.
9	This is not one of those problems. The technologies
10	and the knowledge exist today to prepare our
11	buildings for a carbon-free future. All we need now
12	is the political will to do it.
13	CHAIRPERSON GENNARO: Thank you. I appreciate
14	your testimony, please stay on. We have one Council
15	Member that has raised his hand for questions. So,
16	we'll be posing questions to the Council - to the
17	panel when the panel is completed and I ask Samara to
18	call the next witness in this panel.
19	COMMITTEE COUNSEL: The next witness is Amy
20	Turner from Columbia University Sabin Center for
21	Climate Change Law.
22	SERGEANT AT ARMS: Time starts now.
23	AMY TURNER: Hi, thank you to Chair Gennaro and
24	to the Council for allowing me to participate in
25	today's hearing.

1COMMITTEE ON ENVIRONMENTAL PROTECTION1512My name is Amy Turner. I am the Senior Fellow at3the Sabin Center for Climate Change Law at Columbia4Law School. I research city decarbonization law and5policy and I advise cities across the country on6building decarbonization and building electrification7policies.

I am here today to testify in support of Intro. 8 9 2317 and specifically, I'm here to talk about the city's legal authority to enact Intro. 2317 and in 10 11 particular to do so right away. So, as you know 12 Local Laws in New York City have to have some form of 13 authority to back them up. And in this instance, in 14 the instance of 2317, New York City has ample police 15 powers delegated by New York States Municipal Home 16 Rule Law, specifically the authority to govern in 17 relation to the public health and welfare and for 18 the protection of the city's physical and visual 19 environment.

20 New York City, like other municipalities in the 21 State, is permitted by the New York State Air 22 Pollution Control law to enact local laws relating to 23 air pollution so long as they meet or exceed minimum 24 state requirements as Intro. 2317 does.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 152 2 And finally, of course, New York City has 3 building code authority and so, while there are sufficient - while there is sufficient authority for 4 the city to enact Intro. 2317 through its home rule 5 powers, police powers and air pollution control 6 7 authority, the building code authority buttresses that authority and provides a statutory home for 8 9 Intro. 2317's requirements.

I have a bit more in my written testimony about 10 11 why this law is not preempted. I trust that the 12 Chair will read it, given his enthusiasm for reading 13 testimony. What I want to say is that while New York 14 City has the legal authority to require new building 15 electrification and it has the authority to do so 16 today. There is no reason why the city cannot 17 require that new building permit applications meet 18 Intro. 2317's requirements as soon as it is enacted. 19 SERGEANT AT ARMS: Time expired. 20 AMY TURNER: The city will be behind if it does 21 not enact this law right away. More than 50 allelectric building requirements of various kinds are 2.2 23 already in effect today in the U.S. So, if there is

25 New York City will be showing that it is a follower

24

a long time horizon for implementation of this law,

1COMMITTEE ON ENVIRONMENTAL PROTECTION1532and not a leader on building decarbonization.Thank3you very much.

4 CHAIRPERSON GENNARO: Thank you. Thank you very5 much for your testimony.

COMMITTEE COUNSEL: And the next witness is Leah
Stokes from the University of California at Santa
Barbara.

SERGEANT AT ARMS: Time starts now.

LEAH STOKES: Hi, my name is Dr. Leah Stokes and I'm an Associate Professor. I specialize in energy and climate policy and I am a former resident of New York City and an alumni of Columbia University.

14 New York City has a really big chance right now 15 to join with over 50 other cities across the country who have taken bold steps to stop installing new gas 16 17 in buildings. 2317 being discussed today would be a 18 landmark change that would deliver big public health 19 and climate benefits while creating jobs in the city. 20 I urge you to listen to the expert from WE ACT, New 21 York Communities for Change, Columbia University and 2.2 others who have spoken today. They have told you, 23 get this bill done. Make it apply to gut renovations and make it come into effect as soon as possible. 24

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 154 2 The good news is that building electrification 3 will tackle climate change, create jobs and deliver public health benefits. Scientific research has 4 5 shown that we cannot build any new fossil fuel infrastructure and limit warming to 1.5 degrees. 6 7 That includes putting new gas in buildings and we 8 don't have to do it anymore. We have heat pumps. We 9 have induction stoves.

New York City already has a clean enough grid 10 that electrification does cut carbon pollution. 11 Anybody who has testified today and I've heard 12 13 several people do it who has said otherwise, is being 14 factually inaccurate. I am an energy policy expert 15 and I looked it up myself today. If you put in an 16 electric stove or an electric heat pump, it has a 17 lower carbon footprint today with the electricity mix 18 in New York City today.

In addition, other factually inaccurate statements that have been made have been around how heat pumps are not possible in New York City. This is just not true. Numerous buildings across the city are already being electrified by companies like BlocPower, which is creating good paying jobs and

1COMMITTEE ON ENVIRONMENTAL PROTECTION1552training New Yorkers and you're going to hear people3talk about that.

So, that is factually inaccurate. Scientists have also told us that burning fossil gas in homes is really bad for health. It increases the risk of asthma by 42 percent and even when gas appliances are turned off, they are still leaking including carcinogens.

So, I'd just like to close by saying that Council Member Ampry-Samuel is right. These health impacts are a matter of -

13 SERGEANT AT ARMS: Time expired.

14 LEAH STOKES: Life and death for New Yorkers and 15 they are hitting communities of color the hardest. 16 So, it's time for New York City to ban gas in

17 buildings. Thank you.

18 CHAIRPERSON GENNARO: Thank you. Thank you. I 19 thank this panel and I know that I see Council Member 20 Levin has his hand raised and with the approval of 21 the Moderator, I will recognize Council Member Levin. 22 Is that okay Samara? Unless someone else raised his 23 hand before Steve.

COMMITTEE COUNSEL: No, please recognize Steve.

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1COMMITTEE ON ENVIRONMENTAL PROTECTION1562CHAIRPERSON GENNARO: Yes, it is my pleasure to3recognize Council Member Levin.

4 COUNCIL MEMBER LEVIN: Thank you. Thank you very 5 Chair. My first question is for AJ. You know I was 6 the Council Member who approved that project that 7 you're speaking of in my district.

AJ PIRES: I remember.

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9 COUNCIL MEMBER LEVIN: Yup, right and uhm, you 10 know we had - Alloy as a developer, you guys want to 11 make a profit, right? You guys are looking to have a 12 you know - you're not a non-for-profit. You're a 13 for-profit company, so you have every interest in 14 trying to make a cost effective development, is that 15 correct?

16 AJ PIRES: That's correct, sure.

17 COUNCIL MEMBER LEVIN: And so, to make an all-18 electric building or development as you said, is uh, 19 I forget what the density is on 80 Flatbush but it's 20 a dense development site. You see that as a cost 21 effective way to go?

AJ PIRES: So, the business cases is multifold. Uhm, so, there is a minor upfront cost premium and I would agree with Chris Halfnight sensibility, it's about one to two percent. You're saving costs on 1COMMITTEE ON ENVIRONMENTAL PROTECTION1572somethings. There's no incoming gas line. There is3no gas infrastructure but you're paying a little bit4more for an increased [INAUDIBLE 2:56:02] room and5additional equipment.

6 The long-term benefit is on the operating savings 7 of the building from an energy uses standpoint, as 8 compared to a traditionally designed building. Some 9 of the results are policy-based which is complying 10 with Local Law 97 and the benefits of that and if 11 there is to be a cap and trade program, the 12 additional benefit of that.

This building as designed, would need not just
the 20/30 - 24 rule but the 20/30 rule upon opening.
COUNCIL MEMBER LEVIN: Hmm, hmm.

16 AJ PIRES: The other though is a uhm, is a long-17 term value priority relative to sustainability, which 18 is we believe that the users and occupants of the 19 building are desirous of a place that's from you know 20 looking to lower its carbon impact. And that renters 21 when given the choice of renting across the street or here will choose to rent in a building that is all 2.2 23 electric. Much like most people use their purchasing power to choose one piece of clothing or another or 24 25 one type of food over another.

1COMMITTEE ON ENVIRONMENTAL PROTECTION1582And we believe long-term that uhm, it's those3discretion of values that will be rewarding and bring4the other piece of the economic benefit of the5project.

COUNCIL MEMBER LEVIN: Okay. Are you running 6 7 into practical problems around you know issues around heat pumps or effectiveness around the technology 8 9 that's available now or do you think - you mentioned this in your testimony but that you believe that you 10 11 have the - there's no technological limitations in 12 front of you right now that you see as kind of deal 13 breakers for pursuing this with this development? AJ PIRES: We don't and we're under construction 14 15 with the technology. Some of the testimony today 16 spoke about heat pumps, but they were air sourced 17 heat pumps. We're using water source heat pump. 18 There's also ground source heat pumps. I would also 19 question the ability of the statement that air source 20 heat pumps don't work below a certain temperature. 21 They work in very low temperatures.

Some of that problem has to do with what the design goal is and what the efficiency, air tightness of the building is. So, if you are in a leaky building and you're trying to get to 80 degrees when 1COMMITTEE ON ENVIRONMENTAL PROTECTION1592it's eight degrees outside, it is going to be3incredibly difficult to achieve that with an air4sourced heat pump.

5 If you have an energy efficient building that's 6 designed to a passive house standard and you're 7 looking to get to 72 degrees, you can do that. So, 8 there's truth to a certain extent across the spectrum 9 there but we have an engineered system that works and 10 we are building.

11 COUNCIL MEMBER LEVIN: And again, you said it, 12 this is a skyscraper. This is a big building. Ι 13 mean it was - all you have to do is ask the neighbors 14 and they would tell you that this is a big building 15 on Flatbush Avenue. So, you know, this is not, this 16 is not some three story building or something like 17 that. What's the square footage of the building? 18 AJ PIRES: It's about 400,000 square feet. It's 19 44 stories, a little under 500 feet tall. 440 20 apartments.

21 COUNCIL MEMBER LEVIN: Okay. Okay, well, I'm 22 hopeful that uhm, that your testimony as a developer 23 who is building a building right now in New York City 24 uhm, will be instructive for other you know other

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 160 2 developers in the field who are examining their 3 options right now. 4 SERGEANT AT ARMS: Time expired. 5 COUNCIL MEMBER LEVIN: Thank you. AJ PIRES: Really appreciate the questions Steve. 6 7 COUNCIL MEMBER LEVIN: Yup, you got it. CHAIRPERSON GENNARO: Thank you Council Member 8 9 Levin and uh, thank you - oops. AJ right? Am I 10 talking to AJ right? 11 AJ PIRES: Yup. 12 CHAIRPERSON GENNARO: Yes, thank you for your 13 answer to the Council Member and for your compelling 14 testimony about what you've been able to do with your 15 building. I have one other comment for this panel. 16 Eric 17 Weltman, I well remember the fracking wars and what 18 we went through with the you know New York City 19 drinking water supply water shed and how we carried 20 that through to the whole state and like the 21 documentary that was made about that. That was a huge thing that you played a major role in and I 2.2 23 certainly appreciate your partnership on that. And I applaud the rest of the members of this panel for 24 25 your good testimony. I look forward to getting it in

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 161 2 writing and also having the opportunity to rewatch it 3 in video. And with that said, I'll ask Samara to call the next panel, formerly known as panel nine. 4 COMMITTEE COUNSEL: Okay, panel nine, the 5 plumbing panel. April McIver from the Plumbing 6 7 Foundation, George Bassolino III from the Master Plumber's Council, Artie Klock from the Director of 8 9 Trade Education at UA Local Union Number One and Arthur Goldstein of the Master Plumbers Council. 10 SERGEANT AT ARMS: Time starts now. 11 12 APRIL MCIVER: Great, thank you. Good afternoon, 13 thank you Chairman and Committee Members. My name is 14 April McIver, I am the Executive Director of the Plumbing Foundation. Given time constraints, I am 15 16 going to get right into my testimony on 2317. No one 17 can deny the vulnerability of our climate and the need to take drastic measures to reduce carbon 18 19 emissions. 20 We, the Plumbing Foundation are absolutely 21 supportive of methods to reduce the carbon emissions. And we also urge the Council to take a step back and 2.2 23 consider the larger picture. I strongly urge you to read my entire written testimony which has already 24 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION1622been submitted but I to want to briefly mention some3of the main points.

While the summary of this bill insists that it 4 applied in new buildings and major alterations and I 5 know that was said several times today. The text is 6 7 extremely vague and placement of section two in the construction code, can be interrupted to mean it's 8 9 actually applicable to a much broader universe of buildings. Not just doing gut renovations, so 10 11 clarifications there would defiantly need to be made.

12 In addition, the effective date of two years when 13 passage does not make a ton of sense in terms of the 14 timeline of the emissions goals in the New York City 15 Climate Mobilization Act and the New York State 16 Climate Leadership and Community Protection Act, 17 especially given that the plan to meet those 18 emissions targets is still being determined. I was 19 happy to hear from the city that you know they're 20 working on it but that's very much the status as far 21 as I am aware.

And finally, there hasn't been a full study done. There is another bill on the agenda today 2091 that would be a very necessary step before passing 2317.

1COMMITTEE ON ENVIRONMENTAL PROTECTION1632And we confidently predict that such impact studies3would result in revisions to this bill.

You can reference two reports from California in my full written testimony that I think are of great relevance in terms of the cost of gas bans and electrification.

8 So, rather the Plumbing Foundation suggests a 9 commonsense approach which must include wide 10 encompassing industry and all stakeholder 11 involvement. So, that means all of us. All of here today. I'm actually excited to see how many people 12 13 you know are here to speak about the bill. 14 SERGEANT AT ARMS: Time expired. 15 APRIL MCIVER: Pros and cons. Can I finish my 16 sentence? 17 CHAIRPERSON GENNARO: Yes April, by all means. APRIL MCIVER: Great, so, it's two other points 18 19 are just diversify, meaning sources an incremental 20 approach to phasing out carbon emitting energy sources, as well as educational campaigns in that 21 explaining the facts, science and data behind the 2.2 23 diversified approach.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 164 2 So, we look forward to continuing this 3 conversation with the Council and all stakeholders. 4 Thank you. 5 CHAIRPERSON GENNARO: Thank you April. COMMITTEE COUNSEL: George Bassolino III. 6 7 SERGEANT AT ARMS: Time starts now. GEORGE BASSOLINO III: Okay, good afternoon. 8 My 9 name is George Bassolino and I represent the New York City Master Plumbers Council and I'm also a New York 10 11 City licensed Master Plumber. 12 Besides protecting the health of the nation, 13 licensed master plumbers have been at the forefront of reducing carbon emissions for decades. The clean 14 15 air we breathe today is due in part to our work replacing dirty fossil fuels with cleaner reliable 16 17 natural gas. As few as 30 short years ago, New York 18 City is still installing brand new qualified boilers 19 in our schools. Today, they've been replaced with 20 modern equipment burning natural gas. 21 On a daily basis, licensed Master Plumber's replace existing appliance with new, more efficient 2.2 23 appliances continuing to further New York City's carbon footprint. The vehicles we drive today are 99 24 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION1652percent more efficient then when I started in this3business.

4 The point being here is we're making measurable 5 progress and doing so in a responsible manner and our work is benefiting both the environment and the 6 7 consumer. Nobody denies climate changes is real and must be addressed immediately. At some point, the 8 9 use of fossil fuels must be eliminated but as written, this bill is not only going to prohibit the 10 11 utilization of natural gas and new construction and major renovations but as April pointed out, it would 12 13 also not allow for repairs, replacements or upgrade 14 work.

15 If this is an act of pride to the establishment 16 of requisite infrastructure and electrical generation 17 of capacity, the carbon released in the atmosphere is 18 going to quadruple immediately. Decreasing 19 electrical and retrofit costs, we're going to pose an 20 economic burden on New York City's most vulnerable 21 residents. The possibility of short-term brown and blackouts is going to increase during the summer 2.2 23 months. Some reports are calculated across the banning natural gas for \$25,000 per household. 24 Who is going to cover this cost? 25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 166
2	Many New York City businesses have been unable to
3	pay rent during the pandemic and are struggling to
4	survive. [INAUDIBLE 3:05:55]. Will they survive?
5	New York City needs solutions that allow continued
6	growth and development while maintaining a high
7	standard of living and quality of life. Our economy
8	and daily life depend on reliable energy generation
9	and distribution delivered at a price we can afford.
10	New York City's depending on you -
11	SERGEANT AT ARMS: Time expired.
12	GEORGE BASSOLINO III: Realistic ways that are
13	compatible with reducing greenhouse gas emissions.
14	Thank you for your time.
15	CHAIRPERSON GENNARO: Thank you George.
16	Appreciate your testimony. Please stay on until we
17	finish the panel.
18	GEORGE BASSOLINO III: Thank you.
19	COMMITTEE COUNSEL: The next witness is Artie
20	Klock Director of Trade Education at Local Union One.
21	SERGEANT AT ARMS: Time starts now.
22	ARTIE KLOCK: Good afternoon Mr. Gennaro, members
23	of the Committee. My name is Arthur Klock, I'm
24	Director of Trade Education at Plumber's Local One.
25	I have an intimate knowledge of the fuel gas
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COMMITTEE ON ENVIRONMENTAL PROTECTION 167 infrastructure in New York City having worked in the plumbing industry for over 35 years.

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The last few years have made clear that climate 4 change is most certainly real. Nobody is disputing 5 that. Our union is committed to the development and 6 7 utilization of renewable sources of energy to reduce 8 our carbon footprint. Making the transition from 9 fossil fuels to low carbon sources of energy is the overarching goal. Achieving that goal must be done 10 11 in a carefully planned and well thought out approach, so that we avoid the hardship, expenses and regrets 12 13 of unintended consequences. We are, our union, 14 supports legislation that establishes a comprehensive 15 carbon prizing system to ensure that New York 16 achieves the goals set in the Climate Leadership and 17 Protection Act.

18 A careful reading of this Intro. shows that the 19 gas consuming buildings will be considered to be 20 operating illegally if the Intro. becomes law. 21 Building and home owners will perhaps be given a hardship waiver perhaps but for how long, it isn't 2.2 23 explained and it isn't clear. How they get the waiver, how long they would have the waiver. Is 24 there some kind of grandfathering status? None of 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION1682that is explained in this Intro. It simply makes the3burning of fossil fuel illegal and therefore the4person who is owning that building that burns the5fossil fuel now owns an illegal building.

6 Who's going to pay to scrap the water heaters, 7 the clothes dryers, the boilers, the furnaces, and 8 replace them with electrical alternatives. And how 9 much rewiring is the building going to need? It 10 isn't clear and it isn't explained to anybody who's 11 looking at this.

12 Once it becomes law and the buildings are then 13 burning gas illegally, they are going to face 14 enforcement under as yet unwritten rules by the New 15 York City Department of Buildings.

16 SERGEANT AT ARMS: Time expired.

17 ARTIE KLOCK: The rules aren't part of the law. 18 They come after the law and we're likely to face more 19 unintended consequences for the working class in this 20 city when those people find themselves burying the 21 cost of prematurely replaced gas equipment and pay for rewiring in buildings where this occurs. 2.2 That 23 they try to get a permit from DOB and they're told, okay, now, I'll rip out all your gas equipment. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 169 2 I think these things need to be clarified much 3 more before we move ahead with this. So, as written, 4 we oppose it. We think it needs more clarification. CHAIRPERSON GENNARO: Thank you Artie. Thank you 5 Artie and yeah, but hold on, we'll come back when we 6 7 finish the panel. Appreciate your statement. COMMITTEE COUNSEL: And the final witness for 8 9 this panel is Arthur Goldstein of the Master Plumber's Council. 10 SERGEANT AT ARMS: Time starts now. 11 12 ARTHUR GOLDSTEIN: So, I'm going to pass other 13 than to say I applaud the Chairman Gennaro's passion 14 for this issue going back to if I'm correct, when we 15 were both staff at the City Council. We had the same 16 passion, so I'm going to pass. Thank you. CHAIRPERSON GENNARO: Thank you Arthur. 17 That was 18 more than 30 years ago and God Bless that we both 19 still look the same, imagine that you know. 20 Yes, April, please rest assure that I will read 21 you know your good testimony and everyone who has put 2.2 forward testimony on this panel. You know everyone made points that must be further probed and for this 23 reason, I will tell this panel as I've told all the 24 25 others, make sure we get all this testimony in

1COMMITTEE ON ENVIRONMENTAL PROTECTION1702writing. I'm sure that Arthur will make sure that3that happens. And it will get my full attention and4I look forward to discussing these matters with5Arthur and this good panel in the future weeks.6So, thank you, I appreciate that and thank you

for - we kind of jumped over you in order for balance and thanks for being good sports about that. Okay, so I just want to recognize your patience and working with me in this quest for what I call balance. So, thank you to this panel. And if there are no questions for this panel, we should move onto the next one.

14 COMMITTEE COUNSEL: The next panel Bob Wyman a 15 Geothermal Expert, Zachary Fink of ZBS Geothermal and 16 the Association for Affordable Energy.

17 CHAIRPERSON GENNARO: Yeah, I don't know if we 18 have anybody signed up for the - I mean, I got this 19 list with a question mark after the Association for 20 Affordable Energy. I think staff had been apprised 21 that they would be signing up. We'll see when we call them if they reveal themselves. So, why don't 2.2 23 we start with Mr. Wyman and go from there. COMMITTEE COUNSEL: Okay. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 171 2 BOB WYMAN: Good afternoon, my name is Bob Wyman. 3 My comments were focused on Intro. 2091. I'm an Independent Advocate of Beneficial Electrification, 4 5 particularly focused on encouraging geothermal heat pumps for space and water heating. Working with 6 7 Google, I inspired and Co-Founded Dandelion Energy, now one of the largest providers of geothermal heat 8 9 pumps in the USA. I'm also a party to the rate cases of both Con Ed and National Grid as well as many 10 other utilities in New York State. 11

12 I will not repeat the benefits of electrification mentioned by others. Today, I want to point out that 13 the alternative to beneficial electrification, which 14 15 is continued investment in gas infrastructure will 16 financially ruin us for gas rate payers. While the 17 bill calls for an assessment of the cost of 18 electrification, it should also require an assessment 19 of the cost of not electrifying. Let me explain why. 20 We must recognize that through the way that utilities will cover their costs, continue the 21 expansion of or investment in gas infrastructure will 2.2 23 inevitably result in a very dramatic increase in the delivered price of gas. We will see a death spiral 24 25 for gas that will inevitably impose high costs on the 1COMMITTEE ON ENVIRONMENTAL PROTECTION1722low and moderate income rate payers who are likely to3be the last ones to abandon gas. Even if the gas4commodity magically becomes free, gas will still5become accessibly expensive.

6 The problem is simple, the cost of providing gas 7 service are largely fixed and independent of the 8 quantity of the gas which is sold. It costs the same 9 amount to finance a gas pipe whether it is used to 10 full capacity or abandoned as a stranded asset. Once 11 gas infrastructure investment is made, its costs 12 recovered over periods as long as 85 years.

13 In the past, given a growing demand for gas, it has been possible to spread infrastructure costs over 14 15 an increasingly large number of units of gas sold. 16 However, because the CLCPA Local Law 97 other laws 17 and regulations require that we reduce the quantity 18 of gas sold. Those fixed asset costs will be spread 19 over an increasingly declining volume of sales. The 20 result is a mathematically inevitable cost increase. 21 SERGEANT AT ARMS: Time expired. 2.2 BOB WYMAN: Because - we need to say, because the

23 cost -

24 CHAIRPERSON GENNARO: Please finish your sentence 25 of course. 1COMMITTEE ON ENVIRONMENTAL PROTECTION1732BEN WYMAN: Okay, because the cost of providing3gas service will remain fixed, even as the demand for4gas declines, the price of gas – the pre-unit price5of gas will increase in proportion to the reduction6and demand for gas.

And just one example here -

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8 CHAIRPERSON GENNARO: Please conclude. There is9 only so much give I can extend.

BOB WYMAN: Okay, just if we do reduce consumption by 85 percent as required by the law, that means that the cost of gas delivery must go up at least seven times. Essentially, we cannot afford not to electrify. We can't afford to have people remain on gas. It's time to move on to the second grade electrification of our city.

17 CHAIRPERSON GENNARO: Thank you. Thank you.
18 COMMITTEE COUNSEL: And next witness is Zachary
19 Fink of ZBF Geothermal.

20 SERGEANT AT ARMS: Time starts now.

ZACHARY FINK: Hi, I'm Zachary Fink, I'm the
President of ZBF Geothermal and a Board Member with
the New York Geothermal Energy Organization.

As a family, I'm a third generation in HVAC. My grandfather started his business as an oil delivery

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 174 2 company to convert people from coal to oil. And now, 3 I'm working on electrifying some of the same homes 4 and businesses. In New York City, we have four operational multifamily buildings with Geothermal, 5 each at least seven stories. And we have dozens of 6 7 projects in various stages of design and construction 8 and representing over 3,500 apartments. Over three 9 million square feet of space, ranging from affordable housing to market rate buildings, to our office 10 11 buildings and buildings as high as 36 stories. 12 Geothermal heat systems do no use the outdoor 13 air. So, the concerns about what happens for heat 14 output and a polar vortex or when its zero degrees 15 outside, are not a concern. The ground temperature in New York City is constant. Geothermal systems 16 also reduce environmental noise, eliminating the need 17 18 for condensers, dry coolers and cooling towers on the 19 roofs. 20 Others have mentioned the higher operational 21 costs, so I just want to address that for a second.

22 One of the first large scale geothermal projects we 23 did in New York City was pass an affordable housing 24 project in Far Rockaway. That project has air 25 conditioning costs for the tenants of under \$10 a 1COMMITTEE ON ENVIRONMENTAL PROTECTION1752month, which increases the affordability, increases3the indoor air quality for the residents that in-4affordable housing in New York wouldn't necessarily5otherwise run air conditioning, the cost of the6affordability concern.

7 And then the other big thing that was mentioned 8 was domestic hot water not necessarily being ready 9 for prime time. Since we've started large scale geothermal designs in New York City in 2017. I know 10 11 of at least a dozen new products that have come to 12 the markets. Uhm, including - and these are new to 13 the New York City market, not new to the market as a whole. And a lot of those were driven the cost of 14 15 Local Law 97. So, the phase timing would allow 16 additional products to come out as well.

17 SERGEANT AT ARMS: Time expired.

18 CHAIRPERSON GENNARO: Thank you. Thank you very 19 much for your testimony and uhm, uh, Samara, let's 20 see if the Association for Affordable Energy around. COMMITTEE COUNSEL: I don't see them. Is anyone 21 representing the Association for Affordable Energy? 2.2 23 CHAIRPERSON GENNARO: Okay, why don't we uh - let me just give my comments for this panel. I was the 24 one that you know did my best to get the ball rolling 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 176 on you know geothermal back with I guess it was John Rhyner who worked for Peter Grossman I think.

COMMITTEE COUNSEL: That's right.

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CHAIRPERSON GENNARO: And that was a long time 5 ago to do like a geothermal map, so I certainly 6 7 applaud you know the most renewable of all renewable and speaking as a geologist, I'm a little you know, 8 9 I'm a little partial and biased. You know with regard to my affinity for geothermal and I thank 10 11 these two witnesses for uhm, you know giving this 12 broader audience you know the benefit of this you 13 know technology that I would like to see you know 14 multiply you know many fold in New York City and make 15 sure that you send us both your uh, testimony in full so that we can get benefit. So, we can get the most 16 17 benefit from it.

18 Thank you. Thank you very much for your19 statements today. Group twelve.

COMMITTEE COUNSEL: Group Twelve. John Rath of
New York GEO. This is the Statewide Geothermal
Organization. Bill Nowak of New York Geothermal,
Rachael Grace Rewiring America, Amar Shah Rocky
Mountain Institute and New York Passive House.
CHAIRPERSON GENNARO: Thank you Samara.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 177
2	SERGEANT AT ARMS: Time starts now.
3	JOHN RATH: Thank you Chair Gennaro. I've been
4	itching for over an hour to answer the question of
5	Council Member Ampry-Samuel about how do we get the
6	yes. And also answer your question about whether
7	there's a trade organization involved. And so, I
8	would be one of those people from the trade
9	organization, New York Geothermal Organization. We
10	represent designers, installers, drillers,
11	manufacturers and education people responsible for
12	the installation of energy saving ground source heat
13	pumps. And I'm pleased to know that you're an expert
14	in that, so it's good to hear.
15	As you heard Mr. Fink say, we already have real
16	life examples of healthier and cost competitive
17	buildings in New York City that don't use fossil
18	fuels for space heating. And they don't use them for
19	cooling or hot water heating. We already have
20	contractors that are providing excellent wages for
21	ground source heat pump work in New York City and our
22	members have unfortunately lost cost competitive
23	projects simply because developers do not understand
24	and are not familiar with heat pumps.
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1	COMMITTEE ON ENVIRONMENTAL PROTECTION 178
2	So, this Number 2317 will send a much needed
3	market signal because frankly education isn't going
4	to be enough. And in closing, I just want to let you
5	know that the New York GEO members support Intro.
6	2317 and our members are able and willing to move New
7	York City to a cleaner, healthier and electrified
8	environment. Thank you very much.
9	CHAIRPERSON GENNARO: Thank you John.
10	COMMITTEE COUNSEL: The next speaker is Bill
11	Nowak.
12	SERGEANT AT ARMS: Time starts now.
13	BILL NOWAK: Thank you Chair Gennaro and Counsel
14	Swanston. Regarding bill 2019, the building
15	electrification study, New York GEO completely
16	supports this bill and would be very interested in
17	providing input on GEO Thermals value in electrifying
18	heating without adding to peak demand and stressing
19	the grid.
20	It was good to hear Director Furnas's enthusiasm
21	for the efficiency of air source heat pumps. He'll
22	be even more impressed with the performance of ground
23	source heat pumps, which are significantly more
24	efficient than air source, especially on the coldest
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1COMMITTEE ON ENVIRONMENTAL PROTECTION1792and the hottest days of the year when the grid is3most vulnerable.

This goes directly to Council Member Ampry-4 Samuels earlier question and the points others have 5 raised about the electricity supply. Regarding 2317, 6 7 the writing on the wall needs to be clear for everyone to see. New York's construction and housing 8 9 markets need clear signals on how and when it will be necessary to reduce greenhouse gas emissions. 10 11 There's currently too little awareness as new buildings are going up and old buildings being 12 rehabbed that fossil fuel heating is approaching 13 14 obsolescence and may need to be replaced as 15 significant costs sooner rather than later.

16 The clearest way to send a message is to 17 establish a strong timetable for the transition. Without distinct writing on the wall, it's not clear 18 19 that any amount of cost cutting or education will jar 20 the market out of doing things the way it's always 21 been done. The market is currently comfortable with fossil fuel heating and needs a strong signal to move 2.2 23 that comfort in another direction.

24 We also face an enormous challenge transforming 25 the HVAC industry itself, to one that's working to

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 180
2	meet our climate challenges. A clear set of end
3	dates will be very helpful in turning the attention
4	of HVAC stakeholders to the transition to fossil fuel
5	free heating. New York State has more than adequate
6	supply of contractors capable of installing heat
7	pumps with the small amount of training. What is
8	needed is the market signal.
9	SERGEANT AT ARMS: Time expired.
10	BILL NOWAK: It's important to think of the jobs
11	that will be created and geothermal heat pumps take
12	more labor to install than fossil fuel systems. We
13	urge our friends in the labor movement to look at the
14	big picture, embrace the necessary change and start
15	accessing the tens of thousands of jobs that will be
16	created. Thank you.
17	CHAIRPERSON GENNARO: Thank you Bill. Uh,
18	Samara?
19	COMMITTEE COUNSEL: Yes.
20	CHAIRPERSON GENNARO: Yeah, the next person on
21	this panel, please.
22	COMMITTEE COUNSEL: Amar Shah from the Rocky
23	Mountain Institute.
24	CHAIRPERSON GENNARO: What happened to Rachael?
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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 181 2 COMMITTEE COUNSEL: Uh - oh, Rachael Grace from 3 Rewiring America. Excuse me. 4 SERGEANT AT ARMS: Time starts now. RACHAEL GRACE: Thank you. Thank you Chair 5 Gennaro, the Environmental Protection Committee and 6 7 distinguished members of the New York City Council for your time today and for considering 2317. 8 9 My name is Rachael Grace and I am the Director of 10 Strategic Policy Initiatives at Rewiring America. We 11 are a nonprofit dedicated to widespread 12 electrification as a way to achieve emissions 13 reductions, create jobs and reduce monthly energy 14 bills. We are here today in strong support of Intro. 15 2317 as an ambitious but practical way to advance the 16 city's climate goals. 17 Approximately 75 percent of New York City's 18 greenhouse gas emissions stem from the energy use in 19 buildings. Then over half of these emissions come 20 from heating these largely powered by natural gas. In 2019, natural gas accounted for 62 percent of 21 energy use in mid to large size multifamily 2.2 23 buildings. Also, in 2019, New York City awarded over 24,000 new housing building permits. The majority of 24 which were for large buildings with over 50 units. 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 182 2 All of these are going to need heating. At this pace 3 by 2030, New York may have awarded 240,000 permits for new residential buildings alone. There is simply 4 no way for the City of New York to meet its 5 commitment to carbon neutrality by 2050 without doing 6 7 all it can to minimize if not eliminate emissions 8 originated by these projects.

9 To meet NYC's targets, buildings will need to make the switch from gas infrastructure to electric 10 11 infrastructure. This is clear. Intro. 2317 gives 12 the city an advantage, an opportunity to stop the 13 cycle of infrastructure replacement before it begins. 14 The appliances, the heating and cooling systems will 15 not need to be replaced with efficient electric 16 versions in the years to come because they will 17 already have them installed. This allows the City of 18 New York to focus its attention on helping New 19 Yorkers electrify existing buildings. Getting us on 20 a path to a carbon neutral 2050.

In sum passing 2317, is essential for the City of New York to reach its climate goals. Buildings strive New York's greenhouse gas emissions led by its heating needs. We have the technologies commercially

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 183
2	available today to electrify and we urge the Council
3	to advance Intro. 2317. Thank you.
4	CHAIRPERSON GENNARO: Thank you. Thank you
5	Rachael. Uh, Samara, I think now we're going to Amar
6	Shah, are we not? Samara?
7	COMMITTEE COUNSEL: Amar Shah from the Rocky
8	Mountain Institute.
9	SERGEANT AT ARMS: Time starts now.
10	AMAR SHAH: Good afternoon. My name is Amar
11	Shah, and I'm a Manager at the Rocky Mountain
12	Institute. An independent, nonprofit focused on a
13	just, prosperous, and zero-carbon energy transition
14	globally.
15	I join today to testify in support of Intro.
16	2317, and to urge the Council to pass the bill this
17	year. New York City needs to stop digging its
18	climate hole and stop deepening its reliance on
19	fossil fuels in buildings. I also want to lift up
20	the revisions proposed by Urban Green Council in
21	written testimony, which are specific, ambitious, and
22	feasible in implementation. And these changes can be
23	accomplished this year.
24	Three themes that I hit on this live testimony.

25 First, as noted earlier, reliance on gas in buildings

1COMMITTEE ON ENVIRONMENTAL PROTECTION1842is not just a climate issue but a public health one.3A recent study out of Harvard Chan School of Public4Health, found that New York is the worst state in the5country for premature deaths stemming from air6pollution from buildings. It's not just oil, gas use7was a lead culprit in the study.

8 Second, continued new construction with gas is 9 expensive and risky for New York City. Every building built with fossil fuels today will very 10 11 likely need to be retrofitted at higher cost down the 12 road. To make matters worse, downstate ratepayers are 13 currently subsidizing the addition of new buildings 14 to the gas system, by an estimated \$120 million per 15 year, according to research by New York GEO. One 16 more year \$120 million more of rate payer spending on 17 gas build out that may not even be used for its full 18 youth of life.

Third, in contrast, new all-electric buildings are cost-effective. Research from RMI, NYSERDA, and others has shown that developers can build allelectric and save money doing it. These cost savings will only increase as the market develops.

In conclusion, with more than 100 million square feet of projected building area growth this decade,

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 185 2 Intro. 2317 is an opportunity for New York City to 3 claim a leadership -4 SERGEANT AT ARMS: Time expired. CHAIRPERSON GENNARO: Please conclude. 5 AMAR SHAH: Spur the market and have a 6 7 significant climate and health impact. We encourage this body to act today. Thank you. 8 9 CHAIRPERSON GENNARO: Thank you. Thank you very 10 much. 11 COMMITTEE COUNSEL: We have the - the next quest 12 is New York Passive House. I don't know if anyone's here from New York Passive House. Do we have any one 13 here from New York Passive House? 14 15 CHAIRPERSON GENNARO: Yeah, why don't we save 16 that and if the representative is around, they can 17 testify later but let's not hold things up. 18 COMMITTEE COUNSEL: Okay. 19 CHAIRPERSON GENNARO: Then if there is any more 20 people that want to testify, I actually uh, have a question for uhm, uh, for - well, I guess Mr. Rath 21 and Mr. Nowak, regarding you know the difference 2.2 23 between you know using Geothermal you know versus air for deep pumps. And you know with the consistent you 24 25 know temperature that we find below the earth. You

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 186 2 know just in terms of you know relative efficiency. 3 So, there's that on top of - there are probably areas 4 in the city - this was the whole thrust behind my 5 quest you know years ago to do a full you know geothermal map for New York City where it could be 6 7 best utilized. Because I'm sure that utility companies and other entities who have wires under the 8 9 ground are you know - sometimes can impede the 10 deployment of geothermal. 11 So, that's like the second part of my question. 12 Sort of like the first part is like relative 13 efficiency of you know cold weather. You know, in 14 very cold weather, heating versus - is that uhm in 15 areas of the city that you know geothermal cannot be 16 well utilized because of red tape and other 17 impediments to deploying the technology. I hope that makes sense. 18 19 BILL NOWAK: Of course. 20 CHAIRPERSON GENNARO: And that's for uhm, for 21 John or Bill, whoever wants to take that on. 2.2 BILL NOWAK: Thank you very much for that 23 question Mr. Chair and that's an extremely important point. You know air source heat pumps at relatively 24 25 mild temperatures can be fairly efficient. But

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 187
2	ground source heat pumps, because they rely on the
3	temperature underground, which is constant year
4	round, are much more efficient on the coldest and
5	hottest days of the year. And this is really going
6	to play out. A number of people brought up the point
7	about you know the grid and the impact of
8	electrification on the grid. If you're dealing with
9	an air source heat pump and it get down to a co-
10	efficient of one or one and a half on the coldest
11	days of the year, that will be problematic for the
12	grid.
13	CHAIRPERSON GENNARO: Uh, when you say co-
14	efficient of one or one and a half, like that does
15	that mean?
16	BILL NOWAK: That means essentially the same as
17	electric resistance heat. That you're getting 100
18	percent of what you're putting out into the
19	electrically into the heating system. Whereas with
20	geothermal, on that same day, you'll be at 300 to 400
21	percent. For every unit of electricity, you're
22	putting in, you're going to be getting three or four
23	units of heat.
24	CHAIRPERSON GENNARO: Right.
25	

1COMMITTEE ON ENVIRONMENTAL PROTECTION1882BILL NOWAK: And this really makes a difference3when we come to those coldest days. It is going to4be important that we utilize air source heat pumps.5But wherever possible, we should be working with6ground source heat pumps because of that dampening7effect on peak demand.

8 You know, you mentioned the areas of the city 9 where geothermal might not work because you can't drill through a subway tunnel or a water tunnel. 10 And 11 those are the places that if we electrify, it's going 12 to be air source heat pumps or possibly water source 13 using some of the heated water that's flowing through 14 the city's subways and being wasted in many 15 circumstances.

But you know, we really need to focus as much as we can on ground source and make that the go to technology supplemented by air source where it works out better in more limited circumstances. That would be really important advice and really important information for this panel to take, particularly as you consider the electrification study built.

23 We have a presentation that we've been giving to 24 the Public Services Commission and to the governor's

1COMMITTEE ON ENVIRONMENTAL PROTECTION1892office on this that we would be more than happy to3take you through at some point.

4 CHAIRPERSON GENNARO: Sure, I would direct staff 5 to make sure that that connection is made and that I 6 do get the benefit of - it's Bill, right? I'm 7 talking to Bill right?

BILL NOWAK: Yes.

8

9 CHAIRPERSON GENNARO: Yeah, and I get the benefit of that presentation. Is this something I want to 10 11 pardon the pun, kind of like drill down on, because I 12 think this is you know very important. So, I thank 13 you for that you know clarification and I, you know 14 urge all members of the panel, all panels to send all 15 the good testimony that you've given in writing, so I 16 could study it further. And I really appreciate this 17 panel being here today talking about geothermal and 18 Bill, you particularly for shedding light on the 19 question that I posed.

20 BILL NOWAK: Thank you so much.

CHAIRPERSON GENNARO: Okay, thank you. And now going forward Samara, I mean I don't know if these are folks with various affiliations and are not actually paneled together like, so to speak. So,

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 190 2 should we do one at a time on these or how should we 3 proceed. COMMITTEE COUNSEL: Sure, why not? 4 5 CHAIRPERSON GENNARO: Okay. COMMITTEE COUNSEL: Patrick Boyle from NYSAFAH. 6 7 SERGEANT AT ARMS: Time starts now. PATRICK BOYLE: I'm muted. Hi, can you hear me? 8 9 CHAIRPERSON GENNARO: Yes, gotcha. 10 PATRICK BOYLE: Thanks so much. My name is 11 Patrick Boyle, I'm the Director of Policy for 12 NYSAFAH. We're the trade association for the affordable housing industry in New York State. 13 We almost 400 members, developers, architects, 14 engineers, builders, lenders of affordable housing. 15 16 Some of which I've testified already in support of 17 2317. I want to thank the Chair and the other 18 members of the Committee for the opportunity to 19 submit this testimony and read it. I won't read it work for word in the interest of time. I'll just 20 21 sort of go through. 2.2 CHAIRPERSON GENNARO: Yeah. 23 PATRICK BOYLE: And tell you that the affordable housing industry is very supportive of this. 24 25 Specifically, Intro. 2317 you know really as an

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 191
2	industry association, we've pushed our members to be
3	very aggressive about meeting climate goals. We were
4	supportive of previous climate mandates at the city
5	and state level. A lot of our members are very
6	aggressive with respect to meeting enterprise green
7	community standards, passive house, solar energy,
8	green roofing and a lot of electrification projects.
9	A few of the members that have spoken and testified
10	already have participated in a lot of those fully
11	electric buildings. The NYSAFAH members have
12	contributed to give affordable housing portfolio.
13	So, we're supportive of it. We appreciate the
14	Council making it a priority. We do echo sort of two
15	comments that a number of previous speakers today
16	touched on. Greater clarity is needed in the
17	legislation on what is exactly is meant by the
18	rehabilitations. The definition in there now doesn't
19	conform to the exact DOB code. We understand it to
20	mean sort of major all one renovations but that needs
21	to be sort of more explicit. And number two, as has
22	been said sort of repeatedly, heat and hot water are
23	sort of very different in terms of what's available
24	out there now.

1COMMITTEE ON ENVIRONMENTAL PROTECTION1922So, we support the phase in as it exists in this3bill with respect to heat. We recommend a five year4phase in with respect to electric hot water. Thank5you for your time.

CHAIRPERSON GENNARO: Thank you very much Mr. 6 7 Boyle. Everyone is I'm sure you know very familiar with the good work of NYSAFAH and we appreciate all 8 9 that you do for affordable housing and making that available and also, trying to you know be very much a 10 11 part of between moving and making sure that that will 12 not sacrificing uhm, environmental advancement you 13 know at the expense of affordable housing. We can do both at the same time and no one has been a better 14 15 exemplar of that than NYSAFAH.

So, thank you for being here today. I look
forward to reviewing your full testimony in writing.
PATRICK BOYLE: Thank you.

19 CHAIRPERSON GENNARO: Thank you.

20 COMMITTEE COUNSEL: The next witness is Atalia
21 Howe from the Community Preservation Corporation.
22 SERGEANT AT ARMS: Time starts now.

ATALIA HOWE: Thank you, Chair Gennaro and other distinguished members of the New York City Council, for the opportunity to speak today. My name is 1COMMITTEE ON ENVIRONMENTAL PROTECTION1932Atalia Howe, I am the Assistant Vice President of3Initiatives and Impact Investing at the Community4Preservation Corporation, we're an affordable housing5and community revitalization finance company.

Over our 47-year history, CPC has deployed nearly 6 7 \$12 billion for affordable housing and community development, leading to the creation and preservation 8 9 of nearly 220,000 units of residential housing. CPC supports the intent of Intro. 2317 and shares the 10 11 desire to significantly reduce the city's greenhouse gas emissions. Whole building electrification 12 13 represents an important step towards reaching the 14 city and state's established climate goals.

15 However, there are two main areas of concern. 16 The first is that while electric solutions exist and 17 are reaching cost parity with conventional building 18 systems, large buildings are complex and appropriate 19 solutions for large loads are not yet widely 20 available. As such, we stand with our affordable 21 housing industry partners and recommend the Council 2.2 adopt a five-year phase in period for large buildings 23 to electrify domestic hot water systems.

24 Our second main concern is that the bill25 references major renovations, however, it is not

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 194 defined and should be clarified in the bill text. 2 Ιn 3 the event that the Council decides to include major 4 renovations based on an unambiguous and reasonable 5 definition in the legislation, CPC has outlined the following issues for consideration: Adequate 6 7 Infrastructure and adequate resources. The task of electrifying the city's building stock will require 8 9 additional capital to cover the incremental costs associated with the systems improvements. Owners of 10 11 small buildings and others who operate on thin 12 margins and lack the requisite financial and 13 technical resources, including many owners of rent 14 regulated properties and unsubsidized affordable 15 multifamily, will be particularly effected by a law 16 like this and stable to comply. The Council must 17 make it financially feasible for building owners to 18 retrofit their properties, something that is a clear 19 precedent in our city's past. 20 When New York City needed to revamp its housing 21 stock in 1955, the Council cleared the J-51 tax 2.2 abatement to offset costs and encourage building 23 owners to renovate their properties. It worked. Electrification of the building stock -24 25 SERGEANT AT ARMS: Time expired.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 195 2 ATALIA HOWE: Particularly the existing building 3 stock is no different. City Council should look to the early success of J-51 as a blueprint and 4 5 recognize that it will not be enough to mandate electrification, particularly in existing buildings. 6 7 CHAIRPERSON GENNARO: Thank you Ms. Howe for your compelling testimony and I look forward to getting 8 9 that in writing and you made several points that are you know will get my full attention. So, thank you 10 for that. 11 12 ATALIA HOWE: Thank you. COMMITTEE COUNSEL: The next witness is Eric 13 Liftin of MESH Architectures. 14 15 SERGEANT AT ARMS: Time starts now. 16 ERIC LIFTIN: Hi, I'm Eric Liftin of MESH 17 Architectures. I'm the architect and our firm is 18 based in Brooklyn. At MESH we have been capping gas 19 lines and converting cooking and heating over to electricity for several years, with great results. 20 21 This year, so far, we've completed two allelectric row houses. We're doing a new six-story 2.2 23 building on Union Street, which is nearly complete, we will have no gas in it. Our heating and cooling 24 will be done by electric heat pumps, we will heat our 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 196 water with heat pumps, and our cooking will be done on amazing induction cooktops. These systems work very well and are not particularly expensive. We will also have solar panels on the roof as well by the way.

7 The key thing to keep in mind is that today's buildings are different from old buildings. Our 8 9 buildings are insulated and air sealed. They don't need as much heat as buildings of the past. Burning 10 11 fuel in our buildings is an obsolete practice. It requires exhaust flues and a steady supply of oxygen, 12 which greatly detract from a building's energy 13 14 efficiency. The old model of air leaking in and out 15 of the building while a huge furnace blasts heat into 16 it is long over.

17 Today's heat pumps are incredibly efficient and 18 effective. Cooking on induction stovetops is much 19 safer, easier to maintain, more reliable than gas, and is a pleasure to cook on. Going all-electric is 20 very easy to do, it doesn't cost too much, it's 21 healthier, and it prepares a building that will be 2.2 23 around for many decades to use increasingly sustainably produced electric power. The bill should 24 prohibit all combustion in new buildings and in 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 197 2 renovations that replace heating systems and have an 3 opportunity to modernize insulation. Thank you. 4 CHAIRPERSON GENNARO: Thank you very much for your good testimony and for all the work that you're 5 doing to show how this can be done. I look forward 6 7 to your reading your remarks, which I hope that you will send along to us and all your good works. 8 Thank 9 you. 10 Thank you very much. ERIC LIFTIN: 11 COMMITTEE COUNSEL: Thank you. Jim, the next 12 testimony is from Ismael Diaz Tolentino from El 13 Puente. 14 SERGEANT AT ARMS: Time starts now. 15 ISMAEL DIAZ TOLENTINO: Hello. Thank you for the 16 opportunity. My name is Ismael Diaz-Tolentino and I 17 am the Environmental Justice Coordinator at Puente. 18 El Puente is human rights institution that promotes 19 leadership for peace and justice through the holistic 20 engagement of the community and the arts, education, scientific research and environmental action. 21 We operate mainly in Williamsburg and Bushwick to 2.2 23 low-income communities of colors that have been historically vulnerable to environmental injustices 24 25 with poor air quality being one of the most

1COMMITTEE ON ENVIRONMENTAL PROTECTION1982dangerous. Several sources contribute to poor air3quality in our areas, including the traffic from the4BQE, the Williamsburg Bridge, [INAUDIBLE 3:44:32] and5traffic associated with solid waste facilities.

As we already know a space and water heating 6 7 appliance such as furnaces and boilers burning gas or 8 oil to produce heat and emit several dangerous 9 pollutants. This includes a notorious dangerous fine particulate matter PM-2.25 and others like oxide of 10 11 nitrogen and sulfur. This polluted air takes a toll in our neighborhood and as a consequence the raise of 12 13 asthma and asthma related hospitalizations are double 14 across Brooklyn.

15 Additionally, 6.3 percent of the population in our communities have reported having asthma. 16 А percentage twice as high that raised for New York 17 City respectively. This environmental injustice is 18 19 compounded by high levels of poverty, unemployment 20 and the lack of access to adequate healthcare and for 21 long time residents. And our communities cannot be burdened with any further infrastructure that 2.2 23 comprises the health of the residents and we need to come together to prevent gas infrastructure, that 24

1COMMITTEE ON ENVIRONMENTAL PROTECTION1992does not support the city nor a state commitment to3transition to clean energy.

4 And then gas use in new constructions would avoid large increases in air pollution. From thousands of 5 newly constructed or gut renovated buildings each 6 7 year which would reduce mortality and other health effects such as asthma and other respiratory issues 8 9 in our communities. For our communities to be truly healthy and sustainable, there is the need to 10 11 prioritize these policy changes and create clean jobs 12 while doing it. Our communities in Williamsburg and 13 Bushwick are in support of this bill because it will 14 translate into improve air quality -15 SERGEANT AT ARMS: Time expired. ISMAEL DIAZ TOLENTINO: Better health for our 16

17 residents. Thank you very much.

18 CHAIRPERSON GENNARO: Thank you very much for 19 being a crusader and for you know doing all that you 20 do for your local community and I appreciate your 21 presence here today and your patience. From now on, 2.2 I'm going to start thanking everyone for their 23 patience, we're many hours into the hearing. And I appreciate you and everyone who testified 24 subsequently. Please give us your testimony in 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 200 2 writing, so we can give it the deep dive that we need 3 to do on it. Thank you very much for being here. COMMITTEE COUNSEL: Chairman Gennaro, we are 4 5 going to be switching Moderators now. And we will be switching over to Irene. Irene Brovsky(SP?). 6 7 COMMITTEE COUNSEL: Yes, good afternoon. COMMITTEE COUNSEL: Will transition at four. 8 9 Alright Irene. CHAIRPERSON GENNARO: Okay. 10 11 COMMITTEE COUNSEL: She is going to take over for 12 me. 13 CHAIRPERSON GENNARO: Yes, but I think everyone 14 should give Samara a round of applause for being here 15 so far, how about that. 16 COMMITTEE COUNSEL: Thank you very much Samara. 17 COMMITTEE COUNSEL: Thank you. Thank you. 18 COMMITTEE COUNSEL: My name is Irene Brovsky. 19 COMMITTEE COUNSEL: Irene, I left off at Patrick 20 Houston from New York Communities for Change. 21 COMMITTEE COUNSEL: Thank you very much again 2.2 Samara and our next panelist is Patrick Houston from 23 New York Communities for Change. Patrick. SERGEANT AT ARMS: Time starts now. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 201 2 PATRICK HOUSTON: Okay, there it is, thank you. 3 And yes Houston, Houston like the city. Thank you. My name is Patrick Houston. Thank you for holding 4 5 this hearing. Thank you for this opportunity to testify today. I'm testifying my own behalf as a 6 7 younger person concerned about the climate emergency but also, on behalf of New York Communities for 8 9 Change with whom I work.

I urge the New York City Council to strengthen 10 11 then pass Introduction 2317, this year, to fight 12 climate change. The temperatures of our city, the 13 water levels surrounding it, the frequency of flash 14 floods and subway shutdowns, are all implicated by 15 the action we do or do not take today. I know anecdotes don't answer all of the technical questions 16 in the bill. They can however, put the cost of 17 18 delaying or decreasing the impact of the bill into 19 context. And we heard several short-sided efforts to 20 do so today.

21 So, thus I'll share. In 2012, my AmeriCorps 22 National Civilian Community Corp. team and I were 23 called to assist with Hurricane Sandy response. I 24 remember seeing the devastation. It was surreal. 25 Boats strewn across roads, blocks in from the 1COMMITTEE ON ENVIRONMENTAL PROTECTION2022beachfront, shattered houses with backyards visible3from front yards after flood waters tore through4first floors. I remember recording families'5material losses which seemed endless, spoiled6medications, totaled vehicles, lost pets, inundated7basements and first floors.

8 Further, disrupted school years for many kids and 9 families, displacement, depleted family savings. This all rocked families and communities all while 10 11 NGOs, state and federal agencies scrambled to 12 respond. Chaos by not taking big climate action now, 13 we leave open the floodgates to more of this chaos. 14 Let's do everything in our power to avoid this 15 future. And that means passing the strongest version 16 of Intro. 2317. On that note, we urge at least two 17 major -

SERGEANT AT ARMS: Time expired.

18

19 PATRICK HOUSTON: Adjustments in the bill. I'11 20 just finish with just two major adjustments. One, 21 shorten the timeline to one year for implementation. 2.2 Two, Amend the language to more clearly ensure that 23 gut renovations are included. And further changes have been included in my written testimony, which has 24 been submitted. Thank you. 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 203 2 CHAIRPERSON GENNARO: Thank you Patrick. I look 3 forward to that - uh, your written testimony and I'm 4 happy that you have submitted that. Thank you for being a crusader and all that you do. I appreciate 5 your patience and your good testimony. 6 7 COMMITTEE COUNSEL: And our next panelist is Kim Fraczek from Sane Energy Project. 8 9 SERGEANT AT ARMS: Time starts now. COMMITTEE COUNSEL: Kim Fraczek? 10 11 CHAIRPERSON GENNARO: Uh, if I could jump in, I have on my list Leroy Johnson and Ashton Stuart 12 before Kim but I don't know if they're here. I mean, 13 14 I'm just going off my list. 15 COMMITTEE COUNSEL: Yeah, currently I do not seem them on the list. 16 17 CHAIRPERSON GENNARO: Oh. 18 COMMITTEE COUNSEL: If they join us again, we'll 19 definitely call their names. Let's go to the next panelist. Edith Kantrowitz. 20 SERGEANT AT ARMS: Time starts now. 21 EDITH KANTROWITZ: Hi, my name is Edith 2.2 23 Kantrowitz, I'm with United for Action, a grassroots organization fighting climate change and I'm also 24 25 affiliated with New York City Friends at Clearwater.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 204 2 I would like to add my voice those who have 3 thanked the Committee for having this hearing and those who have urged in the strongest way possible 4 that we passed Intro. 2317 in this session, this year 5 and without delay. Because climate change is not 6 7 delaying. We can see it - I see it right outside my window. I don't see the Antarctic melting, I don't 8 9 see the Artic melting, but what I do see is a tree that is green. 10

11 And every other year at this time, it already turned yellow, bright yellow and so, we see that even 12 13 the natural cycles of our trees in New York City has 14 been disrupted, okay. I would like to also endorse 15 the two changes that have been suggested by many of 16 the other speakers that we should move from a two 17 year implementation framework to a one year 18 implementation and that we should clarify the 19 language around gut renovations to make sure that that renovations are included. 20

In addition to the impact on climate change, this will have tremendous impacts on our air quality in New York City over a thousand people a year die unnecessarily from air pollution related to buildings and the impact of that falls more heavily on

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 205
2	communities of color. And so, by implementing this,
3	we will be taking a big step for environmental
4	justice. Not to add that there will be also a
5	tremendous creation of green jobs and there will be
6	elimination of some of the dangers that we have
7	associated with gas explosions in buildings,
8	providing a safer environment and a healthier
9	environment and a tremendous step towards containing
10	to whatever extent we still can contain climate
11	change. Anyway, thank you for your time and please
12	let's make sure we pass this bill in a stronger form
13	as possible.
14	CHAIRPERSON GENNARO: Thank you Edith very much
15	for your good testimony. We look forward you
16	submitting it to us in writing, if you have not done
17	so already and I want to point out to Irene, I have
18	someone on my list from Sane Energy Project Lee
19	Ziesche it look like. Do you have that? Do you have
20	that Irene? Who was before Edith?
21	COMMITTEE COUNSEL: Mr. Ziesche.
22	CHAIRPERSON GENNARO: It could be that you're
23	dealing with a more updated list because I got mine
24	very early this morning and so, sometimes the staff
25	

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 206 2 has the latest and best list. So, I just don't want 3 to miss anybody. COMMITTEE COUNSEL: Oh, yeah, I totally 4 5 understand Chair. I have my list updated and actually, I just noticed that Kim Fraczek joined us. 6 7 CHAIRPERSON GENNARO: Okay. 8 COMMITTEE COUNSEL: From Sane Energy Project. 9 CHAIRPERSON GENNARO: Yeah, she was uh -KIM FRACZEK: Sorry, I had to bounce off for a 10 11 meeting from three to four but yeah, if I could -12 CHAIRPERSON GENNARO: I'm the Chair and I say 13 you're on, so you're on. 14 SERGEANT AT ARMS: Time starts now. 15 KIM FRACZEK: Thank you so much. My name is Kim Fraczek, I'm the Director of Sane Energy Project. We 16 17 represent uh almost 17,000 New Yorkers working for 18 the past decade to halt fossil fuels and move our 19 economy to 100 percent community owned and led 20 renewables. 21 It is such a pleasure to work with such a forward thinking City Council, and I thank you for your 2.2 23 valiant efforts to address climate change as the crisis that is in our beloved waterfront city. We 24 support Council Member Ampry-Samuel Intro. 2317 that 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 207 2 is long overdue for New York. We must ensure that methane is no longer a part of our energy equation 3 for heating, cooking, and generating electricity in 4 5 our buildings, and this bill is a major piece of the puzzle to get us to a 100 percent sustainable and 6 7 healthy city that can be resilient when the next Super Storm Sandy or Hurricane Ida hits us. 8

9 We also support Council Member Louis 2196, which 10 is also long overdue to ban gas and kitchen stoves. 11 We know that addressing the climate crisis also means 12 addressing the inequitable health and economic crisis 13 that targets low income communities and communities 14 of color, who make New York City the creative, 15 powerful, vibrant city that it is.

16 We know that during Michael Bloomberg's time as 17 Mayor of New York City, he did everything in his 18 power to push for oil to gas conversions, lying to 19 everyone that gas was somehow cleaner and greener, 20 and suppressed programs that uplifted renewable heating for buildings, and pushing for the Spectra 21 pipeline in the West Village to facilitate the 2.2 23 connection with the fracking in PA to force consumption of fracked gas here in New York City, so 24 he could line his personal pockets that were invested 25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 208
2	in the fracking industry. And now have us behind in
3	our climate goals and now we're locked into the
4	rising cost of infrastructure and find ourselves in
5	this mess. We also saw a lag in decision making and
6	commitments from the United States that the COP 26 in
7	Glasgow recently and it's our duty as New York City
8	to be leading this.
9	SERGEANT AT ARMS: Time expired.
10	KIM FRACZEK: Pardon?
11	CHAIRPERSON GENNARO: Your time is up, so I'm
12	asking you to - so, we're asking you to conclude.
13	KIM FRACZEK: Okay, well we support the bill from
14	Council Member Ampry-Samuel. Thank you so much.
15	CHAIRPERSON GENNARO: Thank you. Thank you Kim.
16	Please submit your testimony in writing, we're
17	grateful that you were able to pop back in with us.
18	COMMITTEE COUNSEL: Yup, our next panelist is Lee
19	Ziesche. I apologize if I mispronounced the name.
20	CHAIRPERSON GENNARO: Yeah, it's like Ziesche
21	maybe. I don't know, I don't know. We'll find out.
22	LEE ZIESCHE: Ziesche like rotten sushi.
23	CHAIRPERSON GENNARO: Ziesche, okay, okay.
24	LEE ZIESCHE: Uh yeah, so I am Lee Ziesche. I am
25	Lee Ziesche, I am the Community Engagement
l	

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 209 2 Coordinator for Sane Energy Project. And as my 3 colleague just said, you know we absolutely support 4 Intro. 2317 and we very much support making sure that 5 it gets passed this year and it is not weakened in any way. We support the recommendations made by WE 6 7 ACT and other members of the GasFreeNYC Coalition. 8 And you know we cannot push this down the line 9 Sane Energy as Kim said, has been fighting anymore. frack gas infrastructure for a decade. And for a 10 11 decade, this city has been going in the wrong 12 direction believing the fossil fuel lies that gas is 13 That gas is clean and that is good for our cheap. 14 climate but what we've really been doing over the 15 last ten years is connecting our homes here in New York City through pipelines to fracking fields in 16 17 Pennsylvania. That is one of the most radioactive 18 shale plays in the country.

And so, we are creating pathways for unhealthy gas to come directly into our city and that is leaking all along the root. And what the actual cost of that has been is hundreds of millions of dollars on us as rate payers. National Grid, Con Edison have continued to build pipelines like the North Brooklyn Pipeline, which is in Council Member Ampry-Samuels

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 210
2	district. And you know, this time last year,
3	community members put their bodies on the line to
4	shut down that pipeline because they understand that
5	we have no time left. So, please do not weaken this
6	bill at all. We have such little time and we have
7	spent so much of it going in the wrong direction. We
8	know that this gas is not clean. That when it's
9	being burned in our homes, it is unhealthy for us.
10	We know that the methane that is leaking is just, you
11	know has been sending us in the wrong direction.
12	So, please stand with these communities. You
13	know it really has been New York City communities
14	that have led the fight to get us where we are today.
15	And it's just so crucial that we do not waste anymore
16	time.
17	SERGEANT AT ARMS: Time expired.
18	LEE ZIESCHE: Going in the wrong direction.
19	Thank you so much.
20	CHAIRPERSON GENNARO: Thank you very much for
21	your testimony Lee and please submit your comments in
22	writing. Thank you for all of your advocacy.
23	COMMITTEE COUNSEL: Thank you and our next
24	panelist is Karen Arpino from Northeast Hearth Patio
25	and BBQ Association.
I	

COMMITTEE ON ENVIRONMENTAL PROTECTION 211 SERGEANT AT ARMS: Time starts now.

1

2

3 KAREN ARPINO: It's the Northeast Hearth Patio 4 and BBQ Association. Thank you so much for having me 5 today. I represent the Hearth Patio and BBQ 6 retailers in the northeast, which is New England into 7 New York.

While considering this legislation today, it's 8 9 important to consider that during a time in which 10 natural gas use and infrastructure has expanded across the state, Co2 has been reduced. Co2 11 12 emissions have been reduced. This season, we've 13 already had four weather related power outages that 14 have had homes and business owners relying on gas, 15 oil and wood for heat. Additionally, the economic impacts of full electrification on working families 16 17 and small businesses as well as those in 18 environmental justice communities would be costly 19 with today's rising costs and increasing energy 20 prices.

The consequences of policies that ban affordable energy always hit hardest those who can afford it least. The Northeast HPBA is concerned with the hyperfocus on electrification currently in New York. Three out of five homes or nearly 60 percent of homes

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 212 2 rely on natural gas for home heating and it provides 3 over 40 percent of the states power generation. According to the Energy Information 4 5 Administration, winter field forecasts the average US residential gas customer will pay \$572 for energy 6 7 this winter compared with \$1,209 per households using electricity for heating. That's a difference of 111 8 9 percent. New York area households already pay more 10 than 50 percent more for electricity than the 11 national average. 12 In the last decades, New York has had the 13 countries biggest increase in the number of 14 households using natural gas as a heating fuel source 15 according to the US Census. Between 2005 and 2014, 16 the number of New York natural gas customers went 17 from 3.7 to 4.2. This is an increase of over 500,000 households and is more than a net increase in the 18 19 rest of the country combined. 20 Yet, still in the last several years -21 SERGEANT AT ARMS: Time expired. 2.2 CHAIRPERSON GENNARO: Please conclude. 23 KAREN ARPINO: Despite that in the last decade, Co2 emissions have gone down 18 percent. I submitted 24 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 213 2 my testimony written. Thank you so much for the time 3 today. CHAIRPERSON GENNARO: Thank you Karen. 4 Ι 5 appreciate your being here and thanks for your patience in waiting to testify and thank you for your 6 7 good testimony. I appreciate it. KAREN ARPINO: My pleasure, thank you. 8 9 CHAIRPERSON GENNARO: You bet. 10 COMMITTEE COUNSEL: Thank you Karen. Our next 11 panelist is Moira McComas from Supportive Housing 12 Network of New York. SERGEANT AT ARMS: Time starts now. 13 14 MOIRA MCCOMAS: Hi everyone. My name is Moira 15 McComas, I am a Policy Analyst. Sorry, one moment, 16 I'm pulling up my script. I'm a Policy Analyst at 17 the Supportive Housing Network for New York. 18 Hello, Chair Gennaro and members of the Committee 19 on Environmental Protection. Sorry about that. CHAIRPERSON GENNARO: No, it's all good. 20 21 MOIRA MCCOMAS: Okay. So, the network is a membership organization. We represent over 200 2.2 23 nonprofit members who operate and develop supportive housing. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 214 2 In doing so, we also strive to keep the best 3 interests of tenants and staff a priority. So, supportive housing is permanent affordable housing 4 5 with embedded social services for eligible individuals and families. So, those who are 6 7 experiencing chronic homelessness and living with disabilities. The network has over 100 corporate 8 9 members as well, including tax credit syndicators, banks and other financial institutions. 10

11 So, thank you for this opportunity to submit testimony regarding Intro. 2091. So, the network 12 13 supports many of the goals of this legislation and 14 appreciates the intension and the feasibility 15 component of city measures to decarbonize New York 16 City's buildings. Ultimately, we understand the 17 city's emission reducing targets and initiatives 18 aimed to provide equitable - that benefit the 19 community suffering the worst impacts of pollution. 20 So, we want to underscore just a few specific 21 concerns and then provide some recommendations. So, we have overall concerns with electrification 2.2 23 initiatives. They are going to take a massive public investment and any rent regulations must be paired 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 215 2 with programs that ensure we're not diverting limited 3 resources from the development of supportive housing. 4 So, as the network supports the feasibility assessments, we need and hope that this legislation 5 will be used to identify any issues that would 6 7 disrupt the pipeline preventing preservation efforts 8 and future development. So, we can't allow people 9 experiencing homelessness to suffer as a result of these climate goals. The cost of any required rehab 10 11 system upgrades needs to be addressed in the 12 assessment. And then worked to the parameters of 13 city term sheets. And I just have one more point. 14 SERGEANT AT ARMS: Time expired. 15 CHAIRPERSON GENNARO: What I will do, I will 16 assert my prerogative as Chair and yeah, just to let 17 you finish your thought and then I have a question 18 for you. 19 Sure, thank you. So, there's no MOIRA MCCOMAS: 20 mention of a timetable in the legislation for 21 disseminating information to the community in 2.2 arriving at outcomes. We just need to ensure all 23 assessments are completed and resources are put in place prior to deadlines. 24

1COMMITTEE ON ENVIRONMENTAL PROTECTION2162And we would also - you know we've heard3testimony on 2317, we would like the Committee to4consider adding feasibility studies, not just for5existing buildings but for new construction.

CHAIRPERSON GENNARO: Yeah, you know what? 6 The 7 question - because you were testifying on you know 8 2091 and we appreciate your you know comprehensive 9 testimony on that Intro. because the other two bills today have been kind of in the shadow of 2317 and I 10 11 was wondering whether you thought that 2317 should be sequenced after the completion of 2091. Is that what 12 13 you were getting at? Because the outputs from the 14 study from 2091 will inform 2317. I don't want to 15 put words in your mouth. I just want to make sure 16 that that's your position.

17 MOIRA MCCOMAS: Yes and we've also reached out to 18 New York City Accelerator and we want to get their 19 opinion as well on how those timelines align with 20 Local Law 97 and other local laws. So, I'm looking for some more clarification on that. But we need the 21 2.2 feasibility study to put, as you said inform 2371 and 23 with that, we need to know what the feasibility is and the timeline and the costs associated with new 24

1COMMITTEE ON ENVIRONMENTAL PROTECTION2172construction. Because 2091 is just focusing on3exiting.

4 CHAIRPERSON GENNARO: Right okay, so again, not 5 to put words in your mouth but your position on 2317 6 would be to hold and access, right? Is that a fair 7 statement?

8 MOIRA MCCOMAS: I mean, we are in support of 2137 9 but we just want to make sure -

CHAIRPERSON GENNARO: 2317?

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MOIRA MCCOMAS: 2317 for the record, yup. We want to see the feasibility studies and it could be concurrent but we need to know what is going to happen with 2317 and what the cost feasibility assessment is going to be.

16 CHAIRPERSON GENNARO: And your business is 17 supportive housing and uhm, and you indicated some 18 concerns about the future development of supportive 19 housing in the face of you know bills that we're trying to advance. Could you articulate a little 20 21 more on what your concerns are with regards to supportive housing with respect to these bills? 2.2 23 MOIRA MCCOMAS: Absolutely and thanks for the focus on this for a moment. So, there is currently a 24 25 lack of dedicated and reliable funding to achieve

1COMMITTEE ON ENVIRONMENTAL PROTECTION2182climate goals, especially regarding the financial3burden that's going to be disproportionately put on4the developers of supportive housing. So, we just5don't want any regulations to impede the future6pipeline. And so, we are looking for outcomes of the7feasibility assessment.

8 CHAIRPERSON GENNARO: When you say pipeline, you 9 mean the pipeline of making supportive housing right? 10 MOIRA MCCOMAS: Yup, supportive housing units 11 yes.

12 CHAIRPERSON GENNARO: Because pipeline is kind of13 like a loaded term in this hearing today.

MOIRA MCCOMAS: Sure, fair enough. Yes uhm, so what we need is to make sure the policy bills match the underwriting realities. Term sheets need to be increased to meet climate goals and if that's - since that's the case, this housing budget must also be increased to ensure that we maintain production.

20 CHAIRPERSON GENNARO: Thank you and I look 21 forward to your written testimony and what is your 22 title with regard to the organization Supportive 23 Housing New York? What's your title? 24 MOIRA MCCOMAS: Policy Analyst.

25 CHAIRPERSON GENNARO: Policy Analyst, okay.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 219 2 MOIRA MCCOMAS: Yes. 3 CHAIRPERSON GENNARO: Well, Moira, thank you very much for your testimony and your patience and we look 4 5 forward to your written testimony. MOIRA MCCOMAS: Thank you, appreciate it. 6 7 CHAIRPERSON GENNARO: Thank you. COMMITTEE COUNSEL: Thank you Ms. McComas. 8 Chair, 9 our next panelist is Michelle Hook from New Yorkers for Affordable Energy Coalition. Unfortunately, I do 10 11 not see Ms. Hook online right now. I will circle 12 back and I now would like to call our next panelist. And the next panelist is Hillary Aidun from Earth 13 Justice. 14 15 HILLARY AIDUN: Good afternoon, my name is 16 Hillary Aidun I am an Attorney at Earth Justice. We 17 support Intro. 2317 and urge the Council to adopt the bill but lower the emissions threshold. 18 19 Electrifying buildings is a key component of 20 addressing both climate change and the even more immediate public health threats posed by fossil 21 fuels. Burning fossil fuels in buildings contributes 2.2 23 to dangerous air pollution both indoors and outdoors. Stoves and heating appliances that use gas or oil 24 emit nitrogen dioxide, which causes learning 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2202deficits, aggravated respiratory systems, and changed3lung function, as well as particulate matter, which4can increase the risk of heart and asthma attacks,5and lead to premature death.

Communities of color are exposed to higher levels 6 7 of this pollution than the general population. Intro. 2317 will make a meaningful contribution to 8 9 addressing these problems, by supporting the transition to a more sustainable building stock 10 11 rather than further entrenching reliance on natural gas. But we urge the Council to revise the bill to 12 make sure that this outcome is achieved. 13 The bill's 14 current emissions threshold would prohibit the 15 combustion of pure natural gas in new buildings. But 16 we are concerned that an emissions rate of 50 17 kilograms of carbon dioxide per million BTU creates a 18 loophole that could unintentionally allow continued 19 reliance on natural gas and incentivize the use and 20 expansion of other dangerous fuel sources like 21 hydrogen.

Because combusting hydrogen does not produce carbon dioxide, blending hydrogen with natural gas is often touted as a way to make natural gas cleaner. But nearly all hydrogen is produced using fossil 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 221 2 fuels through an energy-intensive process that 3 generates significant greenhouse gas emissions. And when combusted, hydrogen can emit even higher 4 5 quantities of nitrogen dioxide than natural gas. An emissions standard that could be met by a hydrogen-6 7 natural gas fuel blend would threaten New Yorkers' health by increasing nitrogen dioxide emissions and 8 9 allow the use of natural gas in new buildings.

For these reasons we urge the Council to pass Intro. 2317 but reduce the emissions threshold so that the bill will preclude the use of hydrogennatural gas fuel blends in addition to preventing the use of pure natural gas in new buildings. And for further information, I will refer you to my written testimony. Thank you very much.

17 CHAIRPERSON GENNARO: Thank you Hillary. We 18 appreciate your testimony, your patience, the good 19 points that you made and your service to the great 20 organization Earth Justice. Thank you very much for 21 being here today.

HILLARY AIDUN: Thank you Chair.
 COMMITTEE COUNSEL: Thank you. Our next panelist
 is Lisa DeCaprio from NYU Sierra Club.

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COMMITTEE ON ENVIRONMENTAL PROTECTION 222 LISA DECAPRIO: Hello, yes I'm here. Oh, may I 3 speak?

CHAIRPERSON GENNARO: Yes, you're on.

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5 LISA DECAPRIO: Okay. Alright, my name is Lisa 6 DiCaprio. I am a Professor of Social Sciences in the 7 Division of Applied Undergraduate Studies in NYU's 8 School of Professional Studies and serve as the 9 Coordinator of our new Bachelor of Science in Real 10 Estate and Urban Sustainability.

I am also a member of several environmental 11 12 organizations, including the Sierra Club, which is playing an important role in all-electric building 13 campaigns in the United States. The Sierra New York 14 15 City group has endorsed Intro. 2317. I am going to 16 abbreviate my comments. I did submit my written 17 testimony. Here are several main points. One, 18 electricity is the only form of energy with the 19 potential to be obtained entirely from renewable sources. The electrification of buildings is a 20 global movement and an essential corollary to the 21 greening of the electricity grid throughout the 2.2 world. 23

Two, Intro. 2317 is designed to preempt legalchallenges. Three, gas stoves contribute to indoor

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 223 2 air pollution, as documented in recent studies by the 3 Rocky Mountain Institute, Harvard University and 4 UCLA. Four, all-electric buildings are technically feasible, as demonstrated by the increasing number of 5 new and retrofit all-electric buildings in the U.S. 6 7 and throughout the world, as pointed out by several architects who gave testimony today. 8

9 Moreover, the NYSERDA Buildings of Excellence Competition Award, which was initiated in 2019 10 11 include several all-electric building projects. You 12 may see the projects at the Buildings of Excellence website Round 122 and Round 221. This demonstrates 13 NYSERDA's confidence in all-electric buildings or 14 15 all-electric buildings are economically feasible 16 because electricity is a more efficient source of 17 energy than natural gas or oil.

Five, The electrification of buildings must be accompanied by the reduction of energy consumption, therefore new and substantially retrofitted buildings that are all-electric should achieve the criteria required for a green building certification, such as Passive House Lead Living Building Challenge and net zero energy buildings are for example, several

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 224 2 passive house all-electric buildings in progress or 3 already constructed in New York City. And finally, scientific reports on climate change 4 5 - I would like to just conclude one sentence. CHAIRPERSON GENNARO: Yeah, please conclude. 6 7 LISA DECAPRIO: Alright, scientific reports on climate change issued this year highlight while we 8 9 must simultaneously and I'm emphasizing 10 simultaneously in response to some of the comments 11 made by speakers today. Accelerate the 12 electrification of buildings reduction of energy 13 consumption by green building design and the greening 14 of the electricity grid. As you and Secretary 15 General António Guterres emphasized in his statement 16 on the August 9, 2021, UN Intergovernmental Panel on 17 Climate Change report, "This is code red for 18 humanity." 19 CHAIRPERSON GENNARO: Thank you Lisa for being here and for your service to the Sierra Club and for 20 all the things you do to try to advance sound 21 2.2 environmental policy. 23 I think you indicated you sent your comments in already? Did you? 24 25 LISA DICAPRIO: Yes, I did.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 225
2	CHAIRPERSON GENNARO: Okay, good.
3	LISA DICAPRIO: And what I read today is an
4	abbreviated version of those comments.
5	CHAIRPERSON GENNARO: Yes, I look forward to
6	reading your comments in full. Thank you very much
7	for being here.
8	LISA DICAPRIO: Thank you. Thank you for the
9	hearing.
10	CHAIRPERSON GENNARO: You bet.
11	COMMITTEE COUNSEL: Thank you Professor DiCaprio
12	and our next panelist is Anne Pernick from SAFE
13	Cities.
14	SERGEANT AT ARMS: Time starts now.
15	ANNE PERNICK: There we are. Hi, thank you for
16	the opportunity to talk with you today. I'm Anne
17	Pernick, I'm the SAFE Cities and Fossil Fuel Non-
18	Proliferation Treaty Community Manager at
19	Stand.earth. And I'm connecting to you actually from
20	Portland, Oregon, because New York City is a leader
21	in the SAFE Cities movement. It's an international
22	movement where local governments around the world use
23	their authority to stop fossil fuel expansion and
24	phase out fossil fuels. With passage of Intro. 2317,
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1COMMITTEE ON ENVIRONMENTAL PROTECTION2262you have an opportunity to remain a leader for this3movement and for all New Yorkers.

4 This year has brought more devastating and deadly 5 climate change impacts to New York. It's clear the consequences of fossil fuels are only getting worse, 6 7 for New Yorkers and for people around the world. Meanwhile, the fossil fuel industry and other vested 8 9 interests are still pushing business as usual. It's exciting that this important bill, Intro. 2317, more 10 11 fondly known as the GasFreeNYC bill, is getting a hearing today. New York needs to continue to say no 12 to fossil fuels. 13

The positive impacts of passing GasFreeNYC on local health, including asthma rates in kids - local safety, and global climate will be enormous. That's why hundreds of our Stand.earth community around the city reached out to the Council to urge you and your Council colleagues to do three things.

To ban new hookups of dangerous, unhealthy methane gas, which we're talking about today. To defend Local Law 97, and to join the call for international action on fossil fuels by endorsing the Fossil Fuel Non-Proliferation Treaty, which has had a hearing but not yet a vote by the Committee.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 227
2	We applaud the leadership of Council Member
3	Ampry-Samuel and are honored to be here today along
4	with the local advocates who have been leading this
5	fight to ban new gas hookups. NYPIRG, New York
6	Communities for Change, WE ACT for Environmental
7	Justice, and Food & Water Watch. In partnership with
8	them and with many others, our community urges a yes
9	vote on Intro. 2317 by this Committee and swift
10	passage by the full Council, to protect health and
11	safety around New York City and climate here and
12	around the world. Thank you for your time.
13	CHAIRPERSON GENNARO: Thank you Anne very much
14	for being here and for your patience. And I look
15	forward to reading your comments in full, if you can
16	send those along. Thank you very much.
17	ANNE PERNICK: Absolutely, thank you.
18	CHAIRPERSON GENNARO: You bet.
19	COMMITTEE COUNSEL: Thank you Chair. Thank you
20	Ms. Pernick for your testimony and our next panelist
21	is Emma Urofsky from WE ACT.
22	SERGEANT AT ARMS: Time starts now.
23	EMMA UROFSKY: Hello, my name is Emma Urofsky, I
24	am studying Sustainable Development and I'm a member
25	of WE ACT for Environmental Justice. I am here today
I	I

1COMMITTEE ON ENVIRONMENTAL PROTECTION2282in support of Intro. 2317, and to urge you, members3of City Council, to pass this bill now, with the4urgency the climate crisis demands.

Optimistically, this would be a notable stride 5 towards phasing out toxic gas, oil, and all the 6 7 incredibly deadly pollution that comes with the use of these fuels. Upwards of 1,000 New Yorkers are 8 9 killed every single year from burning fossil fuels, including natural gas in the buildings we learn, eat, 10 11 sleep, worship, and love in. The main opponents to 12 this bill are the Real Estate lobby and ExxonMobil, 13 two actors that profit obscenely by ruining the lives 14 and health of working class people and people of 15 color. Unsurprisingly, the API's also lobbying 16 against this bill. I am so sick and tired of 17 watching this pattern play out again and again on 18 multiple scales of governance.

Everyday people take time out of our already busy days, time that could be spent resting, studying, socializing, or taking care of our loved ones, to fight for what is now the bare minimum of what is needed to do damage control for the climate crisis, while a small group of wealthy White individuals leverage systems of violence and oppression to delay 1 COMMITTEE ON ENVIRONMENTAL PROTECTION 229 2 any meaningful action so they can continue to make 3 more money than they could possibly spend in their lifetimes at the expense of literally every other 4 living thing on this planet. For longer than I have 5 been alive, the fossil fuel industry has been 6 7 succeeding in delaying climate action. Their goal 8 has literally been to delay.

9 I am asking our city representatives, don't let them delay any longer. This is urgent. Legislation 10 11 like this should have been passed in the 1970's. I'm terrified of what's to come and what is already here. 12 13 I don't want to get asthma from living in this city or drown in a basement the next time there's a 14 15 hurricane. I don't want my neighbors to either. We 16 need to stop using fossil fuels to keep each other 17 safe and healthy. It is your job to help the people 18 who live here and you can do this by passing Intro. 19 2317.

Thank you for allotting me time to speak, I hope you do what is best for our city and for our planet. You actually have the power to make a better world, don't waste it bending to a decades old fossil fuel propaganda campaign. Pass Intro. 2317 today.

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1	COMMITTEE ON ENVIRONMENTAL PROTECTION 230
2	CHAIRPERSON GENNARO: Uh, thank you Emma. It is
3	a privilege to have you with us today. I thank you
4	for your patience and for your testimony. I look
5	forward to receiving it in writing if you would be so
6	kind to do so. And I thank you for your service to
7	the great organization WE ACT. Thank you.
8	EMMA UROFSKY: Thank you.
9	COMMITTEE COUNSEL: Thank you Chair and thank you
10	Ms. Urofsky and our next panelist is Gina Kruzic from
11	Water — I'm sorry, from Food and Water Watch.
12	SERGEANT AT ARMS: Time starts now.
13	GINA KRUZIC: Hello. My name is Gina Kruzic, I'm
14	currently a student intern with Food & Water Watch.
15	I'm here to testify in favor of Intro. 2317 and urge
16	the Council to pass it immediately.
17	Intro. 2317 is not only feasible, as we've heard
18	the experts talk about all day but it's your
19	obligation to your constituents. The city's own
20	Office of Climate and Sustainability reports that
21	over 70 percent of our city's greenhouse gas
22	emissions come from our buildings. To take
23	meaningful action in our fight against climate change
24	and meet our own carbon neutrality goals by 2050, we
25	must demand that no new construction has the archaic,
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COMMITTEE ON ENVIRONMENTAL PROTECTION 231 2 problematic, and counterintuitive fossil fuel 3 infrastructure.

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Other cities like Oakland and Seattle already 4 passed similar laws and enacted them within a year. 5 The two-year period this bill is asking for is 6 7 incredibly lenient compared to that. I will also ask those who are still skeptical or in opposition, why? 8 9 The opposition is largely coming from the Real Estate Board of New York and ExxonMobil. We have let real 10 11 estate dictate what goes on in this city for far too long and it has created a city where many cannot 12 13 afford to live and promoted fundamental changes to 14 many of our beloved neighborhoods. We have to live 15 in this city, not ExxonMobil. What is New York City to them except our money? 16

17 It's also worth repeating that climate change is 18 already front and center. The city, New York City 19 and State both have carbon neutrality goals to meet. 20 How are we going to meet them if we don't take decisive action and set the precedent for a fossil 21 fuel free future? If this is the direction we are 2.2 23 heading towards anyway, why resist it? And for all the elected officials who will not be returning to 24 City Council in the upcoming year, do something 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2322incredible before you go and pass Intro. 2317 now.3Thank you.

CHAIRPERSON GENNARO: Thank you. We appreciate 4 uh, uh, Gina, yes, I'm sorry. I have so many names 5 on the list. Thank you for your patience and your 6 7 testimony. We look forward to getting it in writing and for your good service. You're an intern right 8 9 for Food and Water Watch right? Okay, oops, I quess 10 I muted you. GINA KRUZIC: Yeah, that's correct 11

12 CHAIRPERSON GENNARO: Thank you very much for 13 being here and for your passion to try to create a 14 better world. This is a wonderful thing to see. 15 Thank you.

16 GINA KRUZIC: Thank you.

17 COMMITTEE COUNSEL: Thank you and our next 18 panelist is Sabrina Maharaj from New York Public 19 Interest Research Group.

20 SERGEANT AT ARMS: Time starts now.

21 COMMITTEE COUNSEL: Ms. Maharaj?

22 CHAIRPERSON GENNARO: Why don't we pass and 23 circle back.

24 COMMITTEE COUNSEL: Absolutely, our next panelist 25 is Dorian Fulvio from 350 NYC. COMMITTEE ON ENVIRONMENTAL PROTECTION 233 SERGEANT AT ARMS: Time starts now.

3 DORIAN FULVIO: Hi, thank you Council Members and 4 Chair Gennaro. My name is Dorian Fulvio and I'm a 5 lifelong New Yorker, a retired public servant and an 6 active member of 350 NYC.

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7 I support Intro. 2317, the GasFreeNYC bill and I urge the Council to do the same to strengthen the 8 9 bill and to escalate its passing this year. I worked for the city in information technology and I also 10 11 served for about 15 years as my agencies disaster 12 recovery coordinator. I bring this up because I, 13 along with many others had to manage the chaos of 14 Hurricane Sandy and saw first hand how the city 15 struggled to deal with infrastructure failure and our first experience having 300,000 public employees 16 17 unable to go to work.

I vowed that when I retired that I would do 18 19 whatever I could to fight climate change and prevent 20 this from happening to my city again or any city and 21 my testimony today is part of that commitment. There are powerful vested interests working to maintain the 2.2 status quo, to lie to us, feed us disinformation and 23 delay action to reduce our use of fossil gas. As a 24 result of their efforts, we've already seen massive 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2342failure at the federal level and in COP 26 at the3international level as well.

At the local level, we cannot afford to sit idly by. It will be our responsibility to clean up and pay for this mess locally. New York City and State must act now because state and local action is the last best hope for reducing climate change.

9 Intro. 2317 will allow us to take immediate and
10 definitive steps to reduce greenhouse gas emissions.
11 SERGEANT AT ARMS: Time expired.

DORIAN FULVIO: By stopping new infrastructure from being built, Intro. 2317 will prevent millions of metric tons of climate pollution from heating our city and our planet. Thank you very much.

CHAIRPERSON GENNARO: Thank you Dorian. 16 Thank 17 you for your long service to the city and for your 18 ongoing service to quest that you think need to be 19 fought and won. And uhm, uh, I also appreciate that 20 you're part of 350 NYC. Please submit your comments 21 in writing and thank you very much for having the 2.2 patience to be with us all these hours, appreciate 23 it.

24 DORIAN FULVIO: Thank you Chair Gennaro. Thank25 you.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 235
2	CHAIRPERSON GENNARO: You bet.
3	COMMITTEE COUNSEL: Thank you everyone again and
4	our next panelist is Monica Weiss from 350 NYC.
5	SERGEANT AT ARMS: Time starts now.
6	MONICA WEISS: Thank you. Thank you very much.
7	Preempt my own testimony because in the interest of
8	not being redundant, there is very little that hasn't
9	already been said.
10	My name is Monica Weiss, I'm a Retired New York
11	City Educator. I'm a Member of 350 NYC and I want to
12	speak in support of this bill.
13	What I'd like to do first is give a shoutout to
14	Dr. Leah Stokes because basically, what she said and
15	I'm going to leave it at that articulate,
16	intelligent, thoughtful and absolutely correct.
17	Also, I'm going to pick up on Eric Weltman's
18	comment that what happens in New York does not stay
19	in New York, which is absolutely true. If anyone on
20	this Zoom has not yet seen the climate clock at Union
21	Square, I strongly urge you to take a look. We were
22	the first city in the world to have a climate clock
23	installed and it was installed about a year and a
24	half ago at Union Square. And the clock itself has
25	two running streams of information. The first one is
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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 236 2 a deadline which essentially calculates the remaining 3 carbon budget globally of course, not just in New 4 York City. And how much time is remaining until we use up the entire carbon budget on earth. That's 5 about seven years. That line is moving very quickly 6 7 and the one beneath it is in green, which reflects 8 the lifeline which gives information about the amount 9 of clean energy being supported and used and generated. And that number is at about 12 percent. 10 11 So, those two streams of information and whatever 12 you do on the City Council, you need to pay attention to the deadline and to the lifeline. Because if the 13 14 deadline reaches zero before the lifeline reaches 100 15 percent. SERGEANT AT ARMS: Time ended. 16 17 MONICA WEISS: We're in trouble. So, I ask you 18 in all of your deliberations to consider the urgency 19 of this issue when you can consider the solutions. 20 Thank you. 21 CHAIRPERSON GENNARO: Thank you Monica, I 2.2 appreciate your patience. Please send us your 23 comments if you can reduce them to writing, that would be helpful to us and thank you for your service 24 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 237
 to 350 NYC, a great organization. We appreciate you
 being here.

4 COMMITTEE COUNSEL: Thank you. Our next panelist 5 is Candee Kane from 350 NYC.

SERGEANT AT ARMS: Time starts now.

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7 CANDEE KANE: Hello, my name is Candee Kane and I live in Stuyvesant Town-Peter Cooper Village. I have 8 9 lived here since August 1986, 35 years. Passage of Intro. 2317 cannot come soon enough for the residents 10 11 of Stuyvesant Town-Peter Cooper Village. As our 12 landlord, the private equity group, Blackstone, with a market capitalization of around \$110 Billion, wants 13 14 to build two fossil fuel plants, right on the 15 property of Stuyvesant Town.

In fact, they have already built one, on Avenue C 16 17 and 15th Street, and has plans to build an even 18 larger one on 20th Street. We need to pass Intro. 19 Stuyvesant Town-Peter Cooper Village 2317 now. 20 already has the distinction of being the neighborhood 21 with the second worst air quality in the city, because we live across the street from Con Edison, 2.2 23 which burns huge amounts of fossil fuel, to power to all of lower Manhattan. And because we also live 24 across the street from the FDR Drive, where fossil 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2382fuel burning cars and trucks traffic it all day and3all night.

4 I am gasping at the thought of what we are breathing. New York City cannot wait to pass Intro. 5 2317. New York City thinks of itself as a world 6 7 leader, in every arena. It must lead the world in 8 new power technologies. It was already devastated in 9 2012 by Super Storm Sandy. Super Storm Sandy pushed the Atlantic Ocean northward, through the Bay of New 10 11 York, and up the East River, causing the East River 12 to surge over the river's banks. The aforementioned Con Edison -13 14 SERGEANT AT ARMS: Time expired. 15 CHAIRPERSON GENNARO: Please conclude Candee, go 16 ahead. 17 CANDEE KANE: Which sits right there, at the

conjunction of the East River, and Stuyvesant Cove, was flooded. It blew up and shut down, and when it shut down, all of Manhattan, below 39th Street, shut down for a week. Thank you very much. The Council needs to pass 2317 now and to commit our city to a clean future. This matter is urgent and the time is now. Thank you.

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 239 2 CHAIRPERSON GENNARO: Thank you Candee, for your 3 patience. We appreciate it this evening. Oh, oh, we 4 have applause. We have applause, okay. 5 CANDEE KANE: Thank you. CHAIRPERSON GENNARO: It's always good to have 6 7 supporters. 8 CANDEE KANE: Yes. 9 CHAIRPERSON GENNARO: And thank you for 10 advocating on behalf of Stuy-Town and your 11 experiences and how we can be a force for positive 12 change. Please send us your comments in writing if you're able to do that and we would appreciate that 13 14 very much. Thank you. 15 CANDEE KANE: Thank you. Thank you Mr. Gennaro. 16 CHAIRPERSON GENNARO: Thank you. 17 COMMITTEE COUNSEL: Thank you again Ms. Kane. 18 Thank you Chair and our next panelist is Jane Selden. 19 SERGEANT AT ARMS: Time starts now. 20 JANE SELDEN: Hello, my name is Jane Selden. I'm a Retired New York City Community College Instructor 21 and a member of 350 NYC. 2.2 23 I support Intro. 2317 because I'm deeply concerned that we are continuing to build fossil fuel 24 25 infrastructure, including two new frack, gas power

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 240 2 plants in my neighborhood, Stuyvesant Town when we 3 need to be transitioning without delay to fossil-free 4 renewable energy. If we continue to allow gas infrastructure, we are locking ourselves into many 5 more years of the pollution that endangers the health 6 7 of our communities and will lead to climate chaos. 8 Passing 2317 is an essential step forward but the 9 city and state can and must do more. They need to deny permits for any new fossil fuel infrastructure, 10 11 whether it be Peaker plants, pipelines, or CHP, 12 Combined Heat and Power plants like the ones being 13 built on the grounds of Stuyvesant Town. The owners 14 of Stuyvesant Town, the Blackstone Group, a private 15 equity firm, recently built a fracked gas CHP plant 16 on Avenue C, just steps away from the huge Con Ed 17 power plant on 14th street and plans to construct a 18 second larger plant between two residential buildings 19 on 20th Street. 20 The electricity produced by these plants will not

20 Interelectricity produced by these plants will not 21 go to tenants but will instead be sold to Con Ed; 22 however, we, the residents, will be the recipients of 23 the plants' toxic emissions. Our community already 24 suffers from the second worst air quality in the city 25 because of its close proximity to the Con Ed plant

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 241
2	and the FDR Drive. Allowing these plants to operate
3	will not only exacerbate this deadly pollution but is
4	also a 20-year commitment to a continued reliance on
5	fossil-fuels. We are already experiencing the
6	devastating effects of the climate crisis. The time
7	to stop any further fossil fuel infrastructure is
8	now.
9	I urge the City Council to pass 2317 without
10	delay, and I urge the city and state agencies to stop
11	issuing permits to build for additional fossil fuel
12	infrastructure, including the ones for Stuyvesant
13	Town's Combined Heat and Power plants. Thank you.

SERGEANT AT ARMS: Time expired.

15 CHAIRPERSON GENNARO: Thank you Jane. Thank you for your - like Candee, you're advocating on behalf 16 17 of your community and you spent hours to you know give your voice to this hearing and we do appreciate 18 19 that and we look forward to receiving your testimony in writing, if you could do that. Thank you so much. 20 21 JANE SELDEN: Thank you very much. COMMITTEE COUNSEL: Thank you. Our next panelist 22

23 is Ann Logan.

SERGEANT AT ARMS: Time starts now.

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 242 2 ANN LOGAN: Hello, first of all, I'd really like 3 to thank you for continuing this hearing rather than 4 cutting it off before hearing from unaffiliated individuals like me. I do appear at these things 5 from time to time and I have been left waiting at the 6 7 end of a period before. So, thank you. 8 CHAIRPERSON GENNARO: Oh, you bet. 9 I appreciate it. Others have spoken ANN LOGAN: about the two primary details that need to be 10 11 changed. One is to shorten the period before it becomes effective and the other one is to define gut 12 13 renovation. 14 But I'm here about something more personal. When 15 I was thinking about where to retire, I chose New 16 York and New York City in part because of its leading 17 position on issues that progressives like me really 18 care about. One of them certainly was pure water, 19 which New York has made a point of preserving. 20 Another one however was fossil fuels. At the time 21 when I moved here which was just after 911, I thought 2.2 that the climate crisis was something that wasn't 23 going to affect me. That it was going to develop gradually and that I would be dead frankly before it 24 25 got too bad.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 243
2	I was wrong. The infamous end of the hockey
3	stick, it goes straight up. This happening now
4	during my lifetime, we can see measurable changes in
5	everything from wild fires to temperatures, to the
6	acidity of oceans and more. We cannot afford to move
7	slowly. We can be deliberate. We can be well-
8	informed but we have to move expeditiously.
9	SERGEANT AT ARMS: Time expired.
10	CHAIRPERSON GENNARO: Ann —
11	ANN LOGAN: I have one more sentence.
12	CHAIRPERSON GENNARO: Yeah, sure, sure, go ahead
13	Ann.
14	ANN LOGAN: I just wanted to say yes, I know
15	there may be speed bumps, although I have confidence
16	in the human ability to get past them and yes, we may
17	need to support financial support for those who are
18	adversely affected but we have to make changes now.
19	We cannot afford to wait. Thank you.
20	CHAIRPERSON GENNARO: Thank you Ann. Let me just
21	thank you for being the first one to bring up the
22	issue of ocean acidification, as you and perhaps many
23	other people on this Zoom may know or may not about
24	one third of greenhouse gases are absorbed you know
25	by the ocean and that produces carbonic acid. The
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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 244 2 process is called ocean acidification, although you 3 know they are really getting less alkaline really because if the oceans ever do cross that barrier and 4 5 to like a PH you know less than seven, like we're all dead already. But I served as the Chair of the know 6 7 New York State Taskforce on Ocean Acidification. 8 That was a law that was passed by my mentor Steven 9 Englebright and I was working on that when I was the Deputy Commissioner at DEC. And it doesn't get as 10 11 much attention as it should. Thank you for raising 12 that issue. Thank you for being here and I don't 13 care how long hearings go on, I am here for as long 14 as it takes to hear everyone's voice. You know 15 particularly yours Ann, so thank you for being here 16 and advocating for your community. 17 ANN LOGAN: Thank you. This matters so much. 18 Thank you. 19 CHAIRPERSON GENNARO: Thank you Ann. 20 COMMITTEE COUNSEL: Thank you Ms. Logan and our 21 next panelist is Ross Pinkerton. 2.2 SERGEANT AT ARMS: Time starts now. 23 ROSS PINKERTON: Hi, thank you everyone for being here. Thank you for having me and for your time and 24 25 efforts to deal with this critical issue.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 245 2 As a Physics Teacher in Manhattan, I have long 3 been concerned about climate change and its effects on my students' future and clearly after this 4 summer's storms and as the previous speakers have 5 said, on our city right now. But in addition, I 6 7 recently became concerned about the air quality and health impact of gas appliances both on my two sons, 8 9 including Leo here, in our apartment and on my neighbors in East Harlem. I thought it would be easy 10 11 to replace my gas stove and water heater with electric appliances, but I discovered that my fairly 12 13 new building, which was built in 2013, was not 14 designed to supply enough current to each apartment 15 to electrify those appliances. I have the resources fortunately, that I will be 16 17 able to fund retrofits, but it will be much more cost-effective to build new construction with 18 19 electrical appliances in mind. And the bill will 20 also help ensure that the benefits reach lower income 21 New Yorkers and prevent greater environmental 2.2 inequity across communities, as Ismael so eloquently 23 pointed out.

And just to respond to some of the kind of misdirection from opponents, there are cases where

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 246 2 blends including biodiesel may be better than old 3 heating oil systems and I'm sure they will continue to have a use for the many buildings and heavy 4 vehicles that continue to use fuel during the long 5 transition it will take to replace all of New York's 6 7 infrastructure. But we need to not lock in future need for blends or even for full biodiesel because of 8 9 the ongoing carbon and particulate emissions. So, we should not make a blanket exemption for biodiesel as 10 11 some people argued. Instead, we should acknowledge that even with this great bill we're going to have a 12 13 lengthy transition and we will make use of those as 14 they are a little bit better, just like natural gas 15 may be still a little bit better than some others but 16 we shouldn't lock in more use. Thank you very much. 17 CHAIRPERSON GENNARO: Thank you Ross and thank 18 you Leo for participating in this hearing. This 19 hearing is about you Leo, I hope you're listening to 20 us and you know thank you Ross for giving this 21 personal story about how you wanted to retrofit and 2.2 then, you know you got to do it the hard way and some 23 people just aren't in a position to do that. And so, thank you for your patience. Thank you 24 for being a great dad and for being with us today. 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 247 2 Please submit your comments in writing if you'd be so 3 gracious to do that. ROSS PINKERTON: I will, thank you. 4 5 CHAIRPERSON GENNARO: Thank you. COMMITTEE COUNSEL: Chair, I see that Ms. Sabrina 6 7 Maharaj from New York Public Interest Research Group is online and I would like to call her next. 8 9 SABRINA MAHARAJ: Hi, my name is Sabrina. I am a Student at BMCC. Borough of Manhattan Community 10 11 College in Manhattan NY, I am interning with New York 12 Public Interest Research Group. Thank you and the 13 Committee for your time. 14 I support Gas Free NYC Bill Intro. 2317, who's 15 primary sponsor member is Council Member Alicka Ampry-Samuel. I support this bill because in order 16 to halt the worst effects of climate change, we need 17 18 to move away from fossil fuels, and electrifying 19 buildings is a path towards that goal. Buildings 20 emit 70 percent of NYC's greenhouse gases, which 21 pollute the air and contribute to the climate crisis. 2.2 Plus, it uses dangerous fracked gas, which pollutes 23 our water as well. We need to make sure all buildings in the future are running on electricity, not gas, 24 for a fossil fuel free future. 25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 248
2	This issue is also very personal. I have
3	relatives that passed away from the Ida storm. There
4	was flooding in their basement, while they were
5	protecting themselves from the tornado warning.
6	These relatives were part of the 11 other people in
7	NYC that perished from the extreme weather. If we do
8	not stop the worst effects of climate change there
9	will be more people who have similar fates. I don't
10	want anyone dying from massive floods in the future.
11	This is why I support Intro. 2317, to make sure all
12	new construction in new buildings is not hooked up to
13	gas. Thank you for your time, and please pass
14	GasFree NYC.
15	CHAIRPERSON GENNARO: Thank you Sabrina, we
16	appreciate you coming back to be with us. If you
17	could please submit your testimony in writing, that
18	would be great to have for us to continue to study
19	and we really appreciate you being here and for your
20	supportive comments.
21	COMMITTEE COUNSEL: Our next panelist is Miles
22	McManus.
23	SERGEANT AT ARMS: Time starts now.
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COMMITTEE ON ENVIRONMENTAL PROTECTION 249
 MILES MCMANUS: Great, thank you. My name is
 Miles McManus, I live in Manhattan and I'm here to
 support Intro. 2317.

Recent findings from New York's Climate Action 5 Council, which is planning the implementation of the 6 7 CLCPA actually provide another reason that I think this bill needs to move faster. The Council posted 8 9 their initial analysis and some drafts on October 14th and that draft confirms that, "more rapid and 10 widespread end-use electrification and efficiency" 11 12 is needed to achieve the mandates.

13 Just to give one example, the Council scenarios 14 project it will take 30 years to retire existing gas 15 powered space heating as it reaches the end of its 16 lifecycle and gets replaced with electric. It just 17 takes a long time to make the transition gentle for 18 current gas users and of course, that gas will 19 continue to harm New Yorkers health and the climate 20 as it very slowly phases out.

There is a cost benefit analysis included in their latest report as well, which shows very high costs to the state and very high benefits, financial benefits, to moving faster. Now of course, as we've seen, the real estate and petroleum lobbies and other 1COMMITTEE ON ENVIRONMENTAL PROTECTION2502vested interests are going to use every trick in the3book to slow this down but big cities like Seattle,4San Jose and Oakland already have gas bans in place.5And green building techniques premature and6widespread. So, the technology and the industry are7ready and we have no time to spare.

8 So, please speed it up. The bill should take 9 effect one year after passage not two and please 10 ensure that it clearly covers gut renovations and 11 bans all new fossil fuel hookups. Including false 12 solutions like biofuels and blends.

The bottom line is every new gas hookup installed today increase emissions and that's exactly what the CLCPA promises to stop across the state. Please pass Intro. 2317, protect our communities, and help New York start keeping its promises. Thank you.

18 CHAIRPERSON GENNARO: Thank you Mr. McManus for 19 your compelling testimony and for your patience in 20 waiting this long to deliver it. We look forward to 21 getting your testimony in writing if you have not 22 done so already. Thank you.

COMMITTEE COUNSEL: Thank you again for your
 testimony and our next panelist is Delia Kulukundis.
 SERGEANT AT ARMS: Time starts now.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 251 2 DELIA KULUKUNDIS: Thank you for holding this 3 hearing and allowing members of the public to speak to you today. My name is Delia Kulukundis and I live 4 in Long Island City. I'm here to voice my 5 enthusiastic support for Intro. 2317, the GasFreeNYC 6 7 bill and to urge the Council to make it take affect earlier, in one year instead of two. And to clearly 8 9 include gut renovations as well.

By now you know that if we want to avert 10 11 catastrophic climate change and ensure a livable 12 future, every new machine that we install must be 13 electric. If we continue to install new gas-burning 14 appliances, we'll either have to retire them early, or accept the decades of emissions that they lock in. 15 I urge you to consider that with gas, those emissions 16 17 don't just occur when we burn it but all along the 18 leaky pipeline roots that bring it into the city, all 19 the way back to the fields where it fracked and 20 flared in the first place.

It's great that be banned fracking in the state, but we should make fracking obsolete. Right now, as members of this council, you have the ability to ensure that new buildings will be combustion-free, saving everyone from more costly retrofits later and

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 252 2 making the air cleaner for everyone. Your 3 constituents don't want to be stuck with stranded assets in their homes and buildings, and you have the 4 5 ability to prevent that. So, I ask you to stand strong. Don't let REBNY and Exxon scare you. The 6 7 rest of the fossil fuel lobby would like everyone to 8 stay paralyzed with quilt about their personal carbon 9 footprint and keep you distracted with false promises 10 of hydrogen or biofuels or whatever technology they 11 promise to come up with some time in a decade. 12 Ignore it and ignore the calls to delay. We have 13 the technology now and the ability to solve climate 14 change now, and the first step is electrifying 15 everything, starting with new buildings. 16 Please pass Intro. 2317 now. Thank you so much 17 to Council Member Ampry-Samuel for your leadership 18 and for everyone's patience and perseverance, and for 19 letting us you know speak from the public. Thank 20 you. 21 CHAIRPERSON GENNARO: Thank you Delia. We 2.2 appreciate you patience and your compelling 23 testimony. Please submit it to us in writing and I found your testimony compelling and I appreciate it. 24

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 253 2 COMMITTEE COUNSEL: Thank you Ms. Kulukundis and 3 thank you Chair and now, my colleagues Nadia Johnson will continue moderating the hearing. 4 COMMITTEE COUNSEL: Hi, this is Nadia Johnson, I 5 am the Senior Policy Analyst for the Committee on 6 7 Environmental Protection and I will be completing the Moderating tasks for this hearing and I would like to 8 9 call on our -10 CHAIRPERSON GENNARO: Thank you Nadia. Thank you 11 Nadia, I appreciate it. 12 COMMITTEE COUNSEL: Of course. I'd like to call 13 on our next participant Stuart Waldman. SERGEANT AT ARMS: Time starts now. 14 15 STUART WALDMAN: Yes, my name is Stuart Waldman, I'm a Retired Children's Book Publisher who walked 16 17 into a climate act and this was when my granddaughter was born. 18 19 I never imagined I'd spend my golden years committing multiple acts of civil disobedience. 20 When 21 you are 80, sitting bend over and handcuffed in the back of a police van is an act of pure desperation. 2.2 23 But desperation is exactly how I feel at this moment. 24 Two years ago, New York City declared a climate emergency. The definition of emergency by Webster 25

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 254
2	Dictionary is a dangerous situation requiring
3	immediate attention. I referred to the last two
4	words, action and immediate. Twenty years ago, we
5	might have been able to hedge on a bill like Intro.
6	237, we could do — I heard people earlier today you
7	know suggest. We could commission studies, we could
8	delay implementation, we could uses phrases like as
9	soon as possible. Give a little to
10	environmentalists, give a little to REBNY, tell
11	everyone we'll get it right the next time. But
12	climate legislation is different. Nature doesn't
13	compromise, half way isn't good enough, and we are at
14	a moment where there is no next time.
15	This is a state of emergency. A dangerous
16	situation requiring immediate action. They didn't
17	get the troops off the beach as soon as possible.
18	The did what they had to. A robust Intro. 237 would
19	result in significant reduction of emissions. Of
20	course one bill in one city won't keep the world at
21	1.5 degrees. New York is in just of the city. What
22	we do here about the climate sends a powerful message
23	to our state, our country, and the world.
24	Let that message be, we're willing to not just
25	make declarations of an emergency -
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1 COMMITTEE ON ENVIRONMENTAL PROTECTION 255 2 SERGEANT AT ARMS: Time expired. 3 STUART WALDMAN: We'll act as if there is one. Years from now, our children and grandchildren will 4 5 look back at this moment and ask, what did they do when they knew? Let's hope the answer will be the 6 7 right thing. Thank you. CHAIRPERSON GENNARO: Stuart, thank you for being 8 9 here. I gave you extra time on behalf of your 10 grandchildren okay, and so, thank you for your 11 passion. Don't get locked up anymore okay, you know. 12 STUART WALDMAN: I can't promise. 13 CHAIRPERSON GENNARO: Okay, okay, fair enough. 14 Please send us your comments in writing and 15 appreciate your passion and advocacy. 16 COMMITTEE COUNSEL: Thank you. We now call on 17 Samantha Galanti. 18 SERGEANT AT ARMS: Time starts now. 19 SAMANTHA GALANTI: Hi, thank you. My name is 20 Samantha Galanti, I am a full-time College Student 21 and I have successfully completed training in the Climate Reality Leadership Corps. I am speaking 2.2 23 before you today to discuss the urgency and necessity of passing Intro. 2317. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 256 2 It has been recorded that 19 of the hottest years 3 have occurred since 2000 as a result of global 4 warming pollution. As a person born in the year 2002, I live with the unsettling reality that I was 5 born into a climate crisis that was created entirely 6 7 without my assistance. This alarming reality is 8 enough of a reason to stress the urgency of putting 9 an end to the use of gas in new constructions and gut renovations. 10

If the bill it is passed, it will aid in the 11 reduction of air pollution and emissions that heavily 12 13 contributes to global warming and increasingly deadly 14 climate dominions, which will lead to combating the 15 health experience by low income communities and communities of color. It greatly disturbs me that 16 17 while I have the privilege to speak before you today, 18 there are children living in East Harlem who are 19 being hospitalized for asthma at an unnerving rate, 20 which is three times more than the city rate.

And after sharing this information with you, it appears to be inconceivable how many persons or any entity can be against such a bill that will combat these major forms of oppression. However, companies, such as Exxon Mobile have been spreading 1COMMITTEE ON ENVIRONMENTAL PROTECTION2572misinformation and lies to ensure that this bill is3not put into effect.

For far too long, we have seen mythical conspiracies created by those who put dollar signs before people surrounding environmental and racial justice delaying important pieces of legislation such as this one from making real social change that enhances the lives of all members within our communities.

11 My goal for today is that at least one point I 12 have made in this short period of time has inspired 13 and invigorated you to take action in passing this 14 bill and beyond by using your power to promote 15 justice for all. Thank you.

16 CHAIRPERSON GENNARO: Thank you very much 17 Samantha for your patience, for your passion and 18 advocacy and for your dedication to join - what corps 19 are you? The climate? What was it again? 20 SAMANTHA GALANTI: The Climate Reality Corps. Ιt 21 was started by former Vice President Al Gore. CHAIRPERSON GENNARO: Oh, of course. Okay, well 2.2 23 thank you for joining that crusade and for being here with us. If you could send us your testimony in 24 writing, we really appreciate that. Thank you again. 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2582COMMITTEE COUNSEL: Thank you. We next call on3Ken Schles.

SERGEANT AT ARMS: Time starts now.

5 KEN SCHLES: Thank you. I appreciate this time. 6 My name is Ken Schles, I'm a third generation New 7 Yorker and a father of two. A Volunteer with Food 8 and Water Watch with nearly 100,000 supporters here 9 in New York City.

New York Times notable Author and Photographer.
I grew up in this city suffering from asthma, a
disease that nearly took my life on more than one
occasion. Now I suffer from cardiovascular disease
made worse by PM 2.5 and the city is fossil fuel
[INAUDIBLE 4:56:40].

16 In 2016, I nearly died from a heart attack. Both 17 elements are comorbidities are associated with 18 burning fossil fuels. Pass 2317 without delay. 19 Frack gas is a significant indoor pollutant linked to 20 asthma, cancer and premature death. According to a just released Harvard study, gas leakage is two to 21 ten times worse than current EPA estimates. We are 2.2 23 "missing significant sources of methane emissions. These findings provide more evidence that we should 24

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1COMMITTEE ON ENVIRONMENTAL PROTECTION2592be moving away from natural gas towards renewable3energy to heat and electrify our cities."

The human costs, some of which I can attest to are staggering. Loss school, loss work, and irrevocably traumatize families. Tragedy is especially felt in economically and resourced strained environmental justice communities.

9 My cellar flooding during Hurricane Ida, we lost 10 irreplaceable family papers. The CLCPA's Climate 11 Action Council looked at premature mortality, heart 12 attacks, hospitalizations, asthma, emergency room visits and lost work based on fossil fuel emissions. 13 14 The cost of inaction exceeded the cost of action by 15 more than \$80 billion. There are great external 16 benefits. Opportunities to create hundreds of 17 thousands of jobs, improve air quality generating 18 health benefits ranging from 160 to 170 billion. 19 "Reduced emissions avoid economic impacts of damages 20 caused by climate change of approximately \$260 billion." 21

My personal loss may never be ameliorated but others needn't share my fate. If we're to meet emission targets of the -

25 SERGEANT AT ARMS: Time expired.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 260 2 KEN SCHLES: Of the Paris Agreement adhere to COP 3 26 global methane pledge, if we're to keep global warming below 1.5, not burn through our planets 4 forever carbon budget in 11 years, we have to get off 5 fossil fuels. 6 7 Implementing 2317 is not a choice, it's an urgent necessity. I urge you to pass 2317 without an 8 9 extended phase in. Thank you.

10 CHAIRPERSON GENNARO: Thank you Ken. I thank you 11 for your passion and I'm sure I speak for everyone 12 when we wish you good health and if you could submit 13 your comments to us in writing, that would be greatly 14 appreciated.

15 KEN SCHLES: I will.

16 CHAIRPERSON GENNARO: Thank you again.

17 KEN SCHLES: Thank you.

18 COMMITTEE COUNSEL: Thank you. We next call on 19 Matthew Lipschik.

20 SERGEANT AT ARMS: Time starts now.

21 MATTHEW LIPSCHIK: Hello, my name is Matthew 22 Lipschik. I am a lifelong resident of New York City, 23 a retired teacher, a member and volunteer with Food & 24 Water Watch. Thank you for this opportunity. I urge 25 you to pass Intro. 2317 now. COMMITTEE ON ENVIRONMENTAL PROTECTION 261

3	You can take this small step to lower the rate of
4	global heating. It's a powerful step to improving
5	local air quality and health. It will also lower
6	fossil fuel infrastructure accidents. Fewer
7	explosions, leaks, fires, deaths, it's a further
8	improvement to societal health. I don't know what
9	the downside is. If fossil fuel companies' make less
10	money, that's not a concern of the Committee and the
11	real estate lobbies against it but they are too
12	afraid of change to see how this bill will actually
13	benefit New York City real estate. So please,
14	strengthen this bill, pass it today and mandate that
15	it take effect within the next 12 months. Good day,
16	thank you.
17	CHAIRPERSON GENNARO: Thank you Matthew. Thank
18	you for your patience. Thank you for your service to
19	Food and Water Watch, with whom we do a lot of
20	business. And I appreciate your good testimony and
21	if you could transmit that to us, we'd greatly
22	appreciate it.
23	MATTHEW LIPSCHIK: Thank you.
24	CHAIRPERSON GENNARO: You bet.
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COMMITTEE ON ENVIRONMENTAL PROTECTION 262 COMMITTEE COUNSEL: Thank you. Next, we call on Hody Nemes.

SERGEANT AT ARMS: Times starts now.

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5 HODY NEMES: Hello, I'm Rabbi Hody Nemes, I'm the 6 Co-Founder and Leader of Jewish Climate Action 7 Network NYC, which is a group of Jews of many 8 backgrounds. We advocate for climate action as a 9 moral and religious issue and I am here representing 10 them.

11 I'm also here because of my wife. On the night 12 of September 1st, I thought she was going to die. And here is my son. My wife is a pediatric emergency 13 room doctor. Hurricane Ida was raging that night of 14 September 1st and she had to go take care of sick 15 16 kids at the hospital, they needed her. So, she went 17 out into the storm and she called me shortly after 18 leaving our house, panicked. She was on the Major 19 Deegan and floodwaters were rising and her car 20 stalled twice. The waters kept rising, she called 911 and no one answered. 21

22 So, for hours, we wondered if she would survive. 23 And I was home with our young children, one of whom 24 you just heard and I was praying. When EMTs finally 25 rescued her, I cried. And I studied climate change 1COMMITTEE ON ENVIRONMENTAL PROTECTION2632for years but this was the first time you know I felt3it really threatening my family directly.

So, I, like everyone else or many of the people
who have spoken, I'm asking you to pass Intro. 2317.
To strengthen it by making it apply you know in one
year and by making sure to clarify that language
around the gut renovations.

9 I also want to mention that you know, my wife as an ER doctor has seen ironically, she's seen 10 11 thousands of children you know suffering from asthma, particularly from the South Bronx in her ER and we've 12 heard 1,000 New Yorkers are killed by building 13 14 pollution and I just want to mention that you know 15 Jewish tradition, which I'm apart is obsessed with 16 saving lives.

On the very first versus of Genesis, one of our theologians Rabbi Yitz Greenberg has said, "The Torah's central value expressed in ritual and ethics is to increase life and the quality of life." Jewish climate action – SERGEANT AT ARMS: Time expired.

HODY NEMES: We ask that you vote to protect life.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 264 2 CHAIRPERSON GENNARO: Thank you Rabbi. Ahim(SP?) 3 and my wife is Jewish so I got it going on. So, you 4 know sorry that you had that harrowing day in which you didn't know the fate of your wife and may that 5 never happen again. And we appreciate your focus on 6 7 the moral imperative and it is the richness to this 8 proceeding that we deeply appreciate. So, thank you 9 Rabbi very much and please, with that said, that doesn't get you off the hook about sending your 10 11 comments in writing, okay. So, I'm giving you a homework assignment. So, thank you very much. Best 12 to you and your wife and family. 13 14 HODY NEMES: Thank you. Thank you very much. 15 CHAIRPERSON GENNARO: You bet. 16 COMMITTEE COUNSEL: Thank you. Next is Natalie 17 Cronin. 18 SERGEANT AT ARMS: Time starts now. 19 NATALIE CRONIN: Hi, how are you. My name is 20 Natalie Cronin, I am very grateful for this 21 opportunity to support this bill. I'm calling as a mom and daycare provider on the upper East Side. Our 2.2 23 park, Carl Schurz Park faces a big giant powerplant that we're looking forward to going away and we're 24 happy that the Astoria Peaker Plant was not passed. 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2652One of the things that's really important to me3as a person who cooks and uses my home for work and4play and to earn a living is that I learned through5climate action that fossil fuels come into my own6kitchen and some of the pollutants - I'm sorry, I'm7distracted by my kids upstairs right now.

8 Some of the pollutants that are there, are 9 really, really dangerous. What captured my attention was a woman holding a sign saying, radon is bad for 10 11 kids. And as a person from the Western Pennsylvania corner where fracking has started its boom, I learned 12 that the radioactive gas coming from where I grew up 13 14 is actually in my kitchen. And one of the things I 15 know as a mother, the radon, when it breaks down, becomes lead. And we don't want lead dust and we 16 17 don't want lead pollution in our homes, especially if 18 we have children and pets and we also want to make 19 sure that we are able to make sure that our cognition 20 is continuing to strive because learning disabilities 21 strike you at any time, learning challenges.

So, I think that this bill is extremely important to keep pollution our of our day to day homes. It's not just a big far away issue. Climate change is happening right here in New York City and one of 1COMMITTEE ON ENVIRONMENTAL PROTECTION2662things we can do right here, right now is to defend3our own nests, including our kitchens and I thank you4for that.

5 CHAIRPERSON GENNARO: Thank you Natalie, we thank 6 you for being here all simultaneously you know giving 7 us the benefit of your views. You're taking care of 8 your kids; you're taking care of presumably other 9 people's kids.

NATALIE CRONIN: It's a playroom.

11 CHAIRPERSON GENNARO: I think you can it all. 12 So, I really appreciate your perspective. Would be 13 grateful if you could transmit your comments to us 14 in writing and all the best to you. Thank you for 15 your patience in being here and giving us the benefit 16 of your good testimony.

17 NATALIE CRONIN: Thank you, good night.

18 CHAIRPERSON GENNARO: Good night.

19 COMMITTEE COUNSEL: Next, is Amber Ruther.

20 SERGEANT AT ARMS: Time starts now.

AMBER RUTHER: Hello, my name is Amber Ruther, and I work at Alliance for a Green Economy, also known as AGREE. We have been working for years to phase fossil fuels out of buildings and we've helped

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1COMMITTEE ON ENVIRONMENTAL PROTECTION2672over 100 New Yorkers switch to heat pumps through the3HeatSmart CNY program.

AGREE urges the Council to honor the rights of 4 5 New Yorkers to good quality housing, clean air, and a livable climate by passing Intro. 2317 immediately. 6 7 We also encourage you to work with New York's disadvantaged communities to ensure implementation is 8 9 equitable and affordable, and that the emissions standards in this bill are strengthened, loopholes 10 11 are tightened, and expensive, polluting, and false 12 solutions like so-called renewable natural gas, 13 biofuels, and hydrogen are avoided.

14 These false solutions are being pushed by the 15 fossil fuel industry so that we will be forced to 16 continue using their infrastructure, but countless 17 studies show that heat pumps are a safer, healthier, 18 and more cost-effective way to decarbonize the 19 heating sector. The technology for heat pumps is 20 there and cold climate models can operate efficiently below -10 degrees. Very cold countries like Sweden 21 2.2 already get 75 percent of their heat from heat pumps, 23 including geothermal district heating systems designed to capture waste heat. This is not a 24 25 technical problem, it's a political one. We also

1COMMITTEE ON ENVIRONMENTAL PROTECTION2682intervene in utility rate cases around the state and3spending billions building new gas infrastructure4that will soon become stranded assets is coming at a5great cost to ratepayers at a time when over One6million New Yorkers already can't afford their7utility bills.

National Grid is already raising their rates an
average of \$125 a year, and this winter, homes that
heat with fossil fuels are projected to see an
increase in their fuel bills ranging from 22 - 94
percent, while homes that heat using electricity will
see an increase of only 4 - 15 percent.

14 New York leads the nation in premature deaths 15 SERGEANT AT ARMS: Time expired.

AMBER RUTHER: Resulting from the air pollution caused by fossil fuels in buildings. So, we urge you to pass this bill to protect public health. Thank you.

20 CHAIRPERSON GENNARO: Thank you very much Amber. 21 Again, I thank you as I have all of the others who 22 have testified in the later part of the hearing for 23 your patience. We're going on more than five hours 24 and you know, for you to show that kind of dedication 25 to stay in there just to you know give the benefit of 1COMMITTEE ON ENVIRONMENTAL PROTECTION2692your perspective is a real value to what we're doing3here. Please send us your comments in writing and we4wish you all good luck. Thank you.

5 COMMITTEE COUNSEL: Thank you. Next is Marie6 Pierre.

SERGEANT AT ARMS: Time starts now.
MARIE PIERRE: Good afternoon, good evening and
thank you for allowing me to testify. My name is
Marie Pierre and I am the Co-Chair of the Brownsville
Chapter of the New York Communities for Change. I am
also the Chair of the NYCC Board.

I testify today to call on the New York City 13 14 Council to strengthen and pass Intro. 2317. We have 15 been witnessing failure of climate action on the global and national levels. The lesson is clear: it 16 17 is really up to us to secure climate change progress 18 on the local level. Passing a strengthened Intro. 19 2317 will be a victory for New York and the world. 20 We are a city of buildings and I can bring you to my neighborhood to see my buildings. We emit far more 21 than our fair share of pollution as a city. 2.2

Local Law 97 of 2019, was a great step to fight
pollution. But we know more needs to be done,
quickly. Prohibiting the use of gas in our new

1COMMITTEE ON ENVIRONMENTAL PROTECTION2702construction is a common sense follow up to Local Law397. What else is common sense is that the buildings4that undergo gut renovations be required to fully5electrify.

I ask the Council to incorporate concrete 6 7 language to ensure this provision. Likewise, the timeline needs to be shortened on Intro. 2317. Why 8 9 delay when the climate crisis intensifies every day? 10 In Brownsville, we are not the ones contributing to 11 the large scale climate. We commute on public 12 transport. I even have solar panels on the roof of 13 my home. 14 SERGEANT AT ARMS: Time expired.

15 MARIE PIERRE: But we know that we as 16 individuals, cannot do enough to control what's 17 happening. I ask you to pass 2317 and thank you for 18 allowing me to testify.

19 CHAIRPERSON GENNARO: Thank you Marie. Thank you 20 for your patience and your passion and advocacy and 21 your work for New York Communities for Change. 22 Please submit us your comments in writing and we 23 thank you again. 24 MARIE PIERRA: Thanks, thank you too.

25 CHAIRPERSON GENNARO: Thank you.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 271 2 COMMITTEE COUNSEL: Thank you. Next, we call on 3 Georgi. 4 SERGEANT AT ARMS: Time starts now. GEORGI PAGE: Hello, Hello? 5 CHAIRPERSON GENNARO: Yes, hello Georgi, this is 6 7 Chairman Gennaro, you are on. GEORGI PAGE: Okay, I apologize. 8 9 CHAIRPERSON GENNARO: No, it's guite alright. GEORGI PAGE: It's been a long hearing. Good 10 afternoon Chair Gennaro, members of the Committee on 11 12 Environmental Protection and fellow citizens. My name is Georgi Page. I live in District 35 and I am 13 a constituent of Council Member Cumbo and a Volunteer 14 15 with 350 Brooklyn. I am here today to state my 16 strong support for Intro. 2317. 17 I come to the environmental movement through a deep conviction that our country, our cities and 18 19 streets belong to everyone and should be protected and shared equally. I'm thinking specifically today, 20 of the 2014 gas explosion that devastated two 21 apartment buildings on 116th Street in Harlem when I 2.2 23 still lived there. This explosion killed eight people, injuring at least 70, and displacing 100 24 25 families. Ultimately, this failure was blamed on Con

1COMMITTEE ON ENVIRONMENTAL PROTECTION2722Edison, but blaming them did not bring those eight3people back or make up for the disruption and4fracturing of lives and families that occurred.

Gas is dangerous, it is poisonous, it is toxic 5 and we don't need it. Even damage that might seem 6 7 minor to an outsider can have a major effect on the ability to function in everyday life. In any case, 8 9 this is not how this city should function. We need to protect our citizens, not leave them vulnerable 10 11 and damaged. I would like to remember them today as 12 we consider whether it is really necessary to 13 continue fracking dangerous gases out of the ground 14 and piping them across the country and into our 15 cities, causing damage and contamination every step 16 of the way and not just to humans. Our nature and 17 wildlife is also ultimately affected.

18 Are you ok with the prospect of a world without 19 honeybees and pollination? I am not. In the wake of 20 that catastrophe in Harlem, I walked the streets of 21 my neighborhood newly attuned to the rotten egg smell 2.2 of gas in the air and wondered if my building, a 23 five-story walkup, would be next. Are we truly relying on the sharp noses of busy citizens to 24 prevent the next disaster? 25

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 273 2 A recent constitutional amendment passed via 3 statewide vote has firmly established the right of each citizen to clean air and water and a healthful 4 environment. Perhaps the most shocking thing about 5 this new Article is that it didn't already exist. 6 7 SERGEANT AT ARMS: Time expired. GEORGI PAGE: What is more fundamental than this? 8 9 What is our government for if not to protect us? I do not want to make the point that it will personally 10 11 - I do want to make the point that I will personally 12 consider a failure of leadership if the Council only 13 approves feasibility studies. We already know that 14 decarbonizing and electrifying is challenging but it 15 is feasible and possible. So, we need 2317 16 specifically, to pass during these last weeks of the session or we will miss this opportunity and we know 17 18 that Adams is very well funded by real state 19 interests, so it is very urgent that you consider 20 your legacy and not shy away from this bold and 21 progressive action. 2.2 CHAIRPERSON GENNARO: Just conclude. Please 23 conclude. GEORGI PAGE: We will never get this time back. 24

Thank you for your time today.

1	COMMITTEE ON ENVIRONMENTAL PROTECTION 274
2	CHAIRPERSON GENNARO: Thank you very much and
3	thank you for your patience and waiting so long to
4	testify. We greatly appreciate it.
5	COMMITTEE COUNSEL: Thank you. Next is A Wilson.
6	SERGEANT AT ARMS: Time starts now.
7	A WILSON: Hello, hello, good to see you James
8	Gennaro.
9	CHAIRPERSON GENNARO: Yes, hello.
10	A WILSON: I'm glad to be able to speak tonight
11	and I would like to address first the -
12	CHAIRPERSON GENNARO: Is this Annie? Is this
13	Annie?
14	A WILSON: Yes.
15	CHAIRPERSON GENNARO: Oh, it's Annie. You should
16	have said so Annie, yeah, okay.
17	A WILSON: Annie Wilson, yes.
18	CHAIRPERSON GENNARO: Yes, of course.
19	A WILSON: So, for anyone it's been a long time.
20	CHAIRPERSON GENNARO: Yeah.
21	A WILSON: So, I'm really glad to see you where
22	you are and well.
23	CHAIRPERSON GENNARO: Thank you.
24	A WILSON: And so, very quickly, the uhm, the uh,
25	the first comment I wanted to make was about the

1COMMITTEE ON ENVIRONMENTAL PROTECTION2752study of the health impacts from gas stoves and3Intro. 2196 very important, so that people could4really understand when and what they are dealing with5and uhm, I don't know by when this study would be6supplied by.

7 But the second study, looking at the feasibility 8 of electrifying existing buildings and I guess you'll 9 be looking at all issues including what was raised 10 earlier today, the air source and ground source heat 11 pumps. That also, by when would that be published? 12 Just I'm curious.

And so, the Intro. 2317, absolutely should be 13 14 supported and hopefully voted on by the end of the 15 year and strengthened along with a better definition of what the renovations are and addressing a loophole 16 17 that was mentioned earlier. Which would increase or 18 decrease the threshold to 25 kilograms or more of 19 carbon dioxide per million BTU's. And I would like 20 to know how this might coincide with what is the state bill? There is a senate bill 6843, that looks 21 at having introduced by Brian Cavanagh, a state 2.2 23 senator that would require that there be a prohibition to municipalities throughout the state 24 for issuing any new permits for the construction of 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 276 new gas powered buildings after 2023. And conversions of existing buildings, I guess that's renovations after 2022.

So, either way, I suppose that if the city
doesn't pass the state will, hopefully. And uhm,
there was a comment you know with the electrification
and the needs for reduction of emissions.

SERGEANT AT ARMS: Time expired.

9

A WILSON: Okay, let me wrap it up. The need for 10 11 reduction of emissions. We have Local Law 97, we have the using more electricity and I want to address 12 13 what had been mentioned by Ben Furnas, Director of Mayor's Office of Climate and Sustainability and his 14 15 reference to 2500 megawatts coming down from 16 transmission. And he was wrong about his facts. In 17 fact, it's 3,800 megawatts with the Clean Path New 18 York Project and then there's the proposed Blackstone 19 Transmission Corridor that is permanent and should not be contracted out by the City of New York which 20 intents to under this de Blasio Administration to 21 procure power that is sourced from [INAUDIBLE 2.2 23 5:18:511 -

CHAIRPERSON GENNARO: Annie, Annie, we're gettinga little far field here.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 277 2 A WILSON: I'm done. I'm only saying we got to 3 be conscious about where our electricity come from and that's where I'm closing. Thank you very much. 4 CHAIRPERSON GENNARO: Annie, I mean, so your 5 testimony is concluded but I you know thank you for 6 7 you know being so patient and you know, thank you for bringing in these other issues about you know where 8 9 our power is sourced from. Not necessarily like a topic of this hearing but certainly worth noting and 10 11 because you and I are friends, I'm certainly willing 12 to give you a little latitude on that. And I look 13 forward to seeing you again soon, now that I'm back 14 doing this again. 15 So, Annie, I look forward to long and fruitful collaboration with you and like-minded people on who 16 17 we could make the city more green. Thank you. 18 A WILSON: Yeah, thank you. Bye, bye. 19 CHAIRPERSON GENNARO: Bye. 20 COMMITTEE COUNSEL: Thank you. Next, is Harry P. Johnson. 21 2.2 SERGEANT AT ARMS: Time starts now. 23 HARRY P. JOHNSON: Yes, hi. My name is Harry Johnson, I'm the Vice Chair for Flatbush Chapter of 24 25 New York Communities for Change.

1COMMITTEE ON ENVIRONMENTAL PROTECTION2782Today, I urge the City Council to strengthen and3pass Intro. 2317. Please note in my written4testimony, which I have submitted for the record, I5have included some suggestions for strengthening6Intro. 2317 that I think should be incorporated into7the bill.

I wouldn't review those in my verbal remarks now. 8 9 At the end of the day, the situation is quite clear. Burning gas is cooking the planet. From Brooklyn to 10 11 Bangladesh, Black and Brown people are paying the greatest costs. Scientists say we must immediately 12 13 begin phasing out gas fumes. There are cleaner and 14 safer alternatives to gas ready right now. Intro. 15 2317 could be a huge step in the right direction.

It would cut indoor and local air pollution that kills and create tons of good jobs. It will make our city fairer. At the end of the day, we need to rapid and big action to choose a livable future or even a [INAUDIBLE 5:21:13] one or we slow walk off the climate cliff because the people in our society want to make an extra buck.

Let's choose rapid and big action. Decision
maker of the New York City Council, please tighten up
Intro. 2317. A good start as it stands and pass it

1COMMITTEE ON ENVIRONMENTAL PROTECTION2792as soon as possible. Show us you can put climate3justice first. Thank you for holding this important4hearing.

5 CHAIRPERSON GENNARO: Thank you very much Harry 6 for staying around for what it is now? You know more 7 than five and a half hours to give us the benefit of 8 your views and please submit your testimony in 9 writing to us. And we thank you for making a very 10 compelling statement today.

11 HARRY JOHNSON: Thank you.

12 CHAIRPERSON GENNARO: Thank you.

13 COMMITTEE COUNSEL: Thank you. If there has been 14 anyone that we inadvertently missed who was 15 registered to testify today and has yet to have been 16 called, please use the Zoom raise hand function and 17 you will be called in the order that your hand has 18 been raised.

Okay, okay, I see two more people. Thank you for
waiting. First, I will call - three more people.
Rebecca Duvall.

22 REBECCA DUVALL: Hi, I'm Rebecca Duvall, I live 23 in Brooklyn. I enthusiastically support 2017 and 24 would like it to be passed as quickly as possible. I 25 am appealing to you today as somebody who is really

COMMITTEE ON ENVIRONMENTAL PROTECTION 280 worried about our future. I work in a school with two-year-old to 14-year-old children and I love them so much. Their energy and joy for life and their ability to love without limit is really a reason for me to live.

7 I look at the children in my life and my family and surrounding me and when I think of their near 8 9 future, I feel a rush of panic. I worry about the probability that their lives will have more pain 10 11 because of climate collapse and that they will 12 directly experience pain and upheaval from rising 13 temperatures, extreme weather, physical displacement 14 and the social and economic upheaval that comes from 15 these growing changes.

I also worry about the pain that they will witness as the most vulnerable throughout our country and the world bare the most severe consequences of climate destruction hinged on our reliance upon fossil fuels.

In my life, I've already experienced growing trends of extreme weather and the instability that comes from it from Hurricane Sandy to the increasing frequency of slow moving low pressure precipitation systems, that regularly wreak havoc on our

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 281 2 infrastructure on the streets and transit. That have 3 ruined homes and cause loss of lives. I've seen West Coast wildfires burn beyond control and have seen the 4 5 smoke reach New York, less dramatically but quite noticeably. I felt the erratic seasonal shifts that 6 7 come from warming temperatures. Globally, I've seen the oceans irreplaceable 8 9 health compromise -10 SERGEANT AT ARMS: Time expired. 11 REBECCA DUVALL: And plastic waste. I've seen 12 the ocean on fire. I've seen massive numbers of 13 climate migrants lives uprooted far away from me. 14 And while I've seen this, I have seen the city 15 continue passively. I worry when I see the pressure wielded upon the city by the -16 17 CHAIRPERSON GENNARO: Rebecca, please conclude. Please conclude. 18 19 REBECCA DUVALL: And this is intwined with the 20 fossil fuel industry. I'm hopeful that we can reverse this pattern. 2317 is a chance for New York 21 2.2 City to make a -CHAIRPERSON GENNARO: Please conclude. Please 23 conclude. 24

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 282 2 REBECCA DUVALL: We owe it to our children. 3 Thank you. 4 CHAIRPERSON GENNARO: Thank you. Thank you very 5 much for being with us. Please submit us your statement in writing. We appreciate your patience 6 7 and waiting so long to testify. Thank you. COMMITTEE COUNSEL: Thank you. Next, is Nina 8 9 Grigoriev. SERGEANT AT ARMS: Time starts now. 10 11 NINA GRIGORIEV: Hi everyone, can you hear me 12 okay? CHAIRPERSON GENNARO: Yes, you're coming in fine. 13 14 NINA GRIGORIEV: Alright, excellent. Dear Chair 15 Gennaro and Members of the Committee on Environmental 16 Protection. My name is Nina Grigoriev and I live in 17 Bay Ridge Brooklyn. I'm a constituent of Council Member Justin Brannan in District 43. I worked in 18 19 public health communications most of my professional 20 career. I'm a mom of two kids, a first generation 21 immigrant and a Brooklyn native. I'm here to speak on behalf of myself and as a volunteer with 2.2 23 350Brooklyn. I know you've heard form a lot of technical experts already. It's been a really, 24 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 283 2 really long day and really important technical points 3 have been made on both sides.

4 I'm here today to make the case from a really 5 personal perspective from my neck of New York City right here in Brooklyn. I live in a historic 450-6 7 unit pre-war building and I've served on the buildings Board for a number of years. Our building 8 9 has been aging and needed a lot of repairs. My experience on the board has convinced me that Intro. 10 11 2317 is a common-sense measure that as many experts already testified today will put New York City on a 12 13 path to modernize our very old and frail

14 infrastructure.

1

15 Over the past few years, Bay Ridge has had multiple major gas leaks, major health and safety 16 17 issue, I don't have to tell you that. As a result, 18 our streets, right down the street from here, have 19 been torn up to replace aging gas pipes. The pipe 20 replacement work has been done right next to our local school across the street from where I live PS 21 2.2 102. The waterfront along Shore Road, an area popular with families such as mine. And next to 23 major commercial strips on Third Avenues, where 24 thousands of people eat and shop every day. A lot of 25

COMMITTEE ON ENVIRONMENTAL PROTECTION 284
 folks, if you haven't come to Third Avenue to grab a
 bite, come. It's awesome.

4 I appreciate the city allocating resources to 5 replace some of those old, old pipes, but moving away from a reliance on gas for heating and cooking would 6 reduce the need for costly road repairs and the 7 8 resulting traffic jams and parking nightmare, as well 9 as the release of very harmful gases into our air. 10 SERGEANT AT ARMS: Time expired. NINA GRIGORIEV: I don't want to have 3-1-1 on 11

12 speed dial. Are we out of time?

13 CHAIRPERSON GENNARO: Sadly, yes.

14 NINA GRIGORIEV: Okay, well, I think you get my 15 point. Everyone deserves to go home and have dinner 16 right now but Chairman Gennaro, thank you so much for 17 your patience, your grace and your humor. For five 18 and a half hours, that's wild.

19 CHAIRPERSON GENNARO: It's nothing, it's nothing.20 I could do ten. I could do ten you know.

21 NINA GRIGORIEV: I submitted my testimony as 22 well. I think it's one small slice from one person 23 in this big, big city but thank you for all of your 24 work on this issue. Thank you.

1 COMMITTEE ON ENVIRONMENTAL PROTECTION 285 2 CHAIRPERSON GENNARO: Thank you very much for 3 being patient and giving us the benefit of your heartfelt personal views. And say hi to Justin 4 5 Brannan for me, okay. NINA GRIGORIEV: Will do. I see him around all 6 7 the time. CHAIRPERSON GENNARO: Okay, okay, great, thank 8 9 you. 10 COMMITTEE COUNSEL: Thank you and finally we have Donna Gill. 11 12 SERGEANT AT ARMS: Time starts now. DONNA GILL: Did you unmute me? Thank you very 13 14 much Chairman Gennaro and everyone. 15 CHAIRPERSON GENNARO: Thank you. 16 DONNA GILL: For listening to us today. I come 17 to you to say pass Intro. 2317 and I am a member of 18 WE ACT, with my colleagues uhm, uh, my WE ACT 19 colleagues Annie and LJ and Sono(SP?) and other people. 20 21 I just wanted to bring us back to what we were talking about the Intro. 2317 is called GasFreeNYC. 2.2 23 And this bill ends gas in new constructions and gut renovations. The bill also fights climate crisis, 24 creates energy jobs, cuts deadly air pollution in our 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2862neighborhoods, ends gas explosions and fires and3promotes environmental justice.

So, I thank you for having me to speak on this bill today because it's very important as my colleagues spoke so eloquently. The leaders in the industry and common everyday people like us who are the one's that are going to benefit from the impact of this - from a GasFreeNYC.

I know we need to be change agents and to push us forward. So, I thank you for having this and for staying with us for this long. I appreciate you. I appreciate the City Council but the bottom line is pass Intro. 2317. Thank you.

15 CHAIRPERSON GENNARO: Thank you Donna. Ι 16 appreciate everything that you do. Your work for WE ACT. You know many, many, I guess it's like 20 years 17 18 ago, it's just like I got my you know the first 19 environmental award I ever got was from WE ACT. You 20 know Peggy and I have been you know friends for a long time and I've always had a special place in my 21 heart for Peggy and for WE ACT and boy, don't we miss 2.2 23 Cecil Corban Mark(SP?). You know it's so sad still that he is not with us but he is with us today and 24 uhm, uhm, yeah, so I think that's a good way to end 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2872the hearing to think about Cecil and how we dedicated3his professional life towards making sure that we had4a greener city and a better life.

So, there you have it. And so, thank you Donna.
We appreciate your good testimony. Please submit it
in writing and thank you very much.

8 COMMITTEE COUNSEL: Thank you and that concludes 9 public testimony and I now pass it back to Chair 10 Gennaro for any closing remarks.

CHAIRPERSON GENNARO: Sure, I want to thank all 11 12 of the you know witnesses. Am I unmuted- yeah, I'm unmuted. I want to thank all of the witnesses who 13 14 gave us you know their whole day. As I go to the 15 gallery function I notice that there are many people 16 who testified hours ago who are still on. I think 17 that's a testimony you know to the passion about you 18 know 2317 and the other bills. And a passion for you 19 know greater New Yorker and greener New York. I want 20 to thank staff, the Moderators, we have Nadia and who 21 do we have? Nina and everyone who served as a Moderator. All the staff. I want to thank the 2.2 23 Speaker of the Council Corey Johnson and Chief of Staff Jason Goldman and my staff Nabi(SP?) and Samara 24 and all the folks that put this good hearing 25

1COMMITTEE ON ENVIRONMENTAL PROTECTION2882together. I'm saving my highest praise for Council3Member Ampry-Samuels. You know Council Member Ampry-4Samuel has really been a real force and a real change5maker and I thank her very much for her you know6advocacy in bringing this bill forward.

7 And I look forward to what is to come. I don't know if she's still on but I'm grateful to her and 8 9 with no one else wishing to be heard and my thanks having been expressed. My deep credit to everyone 10 11 involved in this hearing, with sadness because I 12 could go another two hours. I am closing the hearing. Oh, Alicka, do you want to say something? 13 14 I see you.

Okay, okay, I got a thumbs up from Alicka. I
will take it okay. Thank you all very much and with
that, this hearing is officially adjourned. [GAVEL]
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CERTIFICATE

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date _____ December 27, 2021