

CITY COUNCIL  
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

of the

COMMITTEE ON ENVIRONMENTAL PROTECTION

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February 25, 2009  
Start: 10:00 am  
Recess: 02:00 pm

HELD AT:                   Hearing Room  
                              250 Broadway  
                              New York, NY

B E F O R E:                   JAMES F. GENNARO  
                                  Chairperson

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## A P P E A R A N C E S

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Brookhaven National Laboratory

Kelly Robinson  
League of Conservation Voters

Michael Seilback  
VP of Public Policy and Communications  
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Judy Jarnefeld  
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## A P P E A R A N C E S (CONTINUED)

Paul Nazzaro  
Petroleum Liaison  
National Biodiesel Board  
On Behalf of:  
Michael Ferrante  
Massachusetts Oilheat Council

Michael Heimbinder  
Executive Director  
Habitat Map

John Hubra  
President  
National Oilheat Research Alliance

Gene V. Pullo  
President  
Metro Terminals

John Maniscalco  
President  
NY Oil Heating Association

Daniel Falcone  
Owner  
Total Fuel Services

Brent Baker  
CEO  
Tri-State Biodiesel

Fredric V. Giffords  
Chairman  
Interstate Biofuels LLC

Bernardo Issel  
Resident  
New York City

CHAIRPERSON GENNARO: Thank you and good morning. I'm New York City Councilman Jim Gennaro. This is a hearing of the Committee on Environmental Protection. We're going to be doing an oversight hearing on the sustainability of biofuels. At some point during the proceedings when we have a quorum, we're going to be taking just quick vote on two legislative items that are not part of today's oversight topic. It's a little bit of housekeeping that we'll do. That'll just be two minutes to take care of that once we get a quorum of members. I want to thank many of the people that made today's hearing possible. Counsel to the committee, Samara Swanston and Policy Analyst, Siobhan Watson did a lot to prepare for today's hearing. We certainly appreciate. My own Chief of Staff, Leah Carter and Costa Constantinides and Shams Tarek also helped out quite a bit with this hearing and I appreciate that. We also have people who have flown in from far and wide to be a part of today's proceedings. We appreciate the valuable insights that they're going to bring to our discussion of this important matter. I want to recognize in a

1 special way my gratitude to the Bloomberg  
2 administration and to the Office of Long-Term  
3 Planning and Sustainability for their good faith  
4 efforts that they've put forward to try to get the  
5 fullest understanding of all of the implications  
6 of the sustainability of biofuels that the  
7 possibly can in order to come to some closure  
8 about what the city wants to do with regard to our  
9 biofuels policy. I thank them for all of their  
10 good work. The U.S. uses more oil every day than  
11 any other nation in the world, using more than 20  
12 million barrels of oil per day. Of that 60%, or  
13 more than 12 million barrels of oil per day are  
14 imported, with more than 700,000 barrels per day  
15 imported from OPEC and of course, it costs a lot  
16 of money to do this. The U.S. spends more than  
17 \$200,000 per minute on foreign oil, which is 3% of  
18 the world's oil. We appear to have little choice  
19 in our dependence on foreign oil. Biofuels are a  
20 promising way for the U.S. to reduce its  
21 dependence on foreign while dealing with local air  
22 pollution problems. Biofuels produce less of the  
23 particulate matter, sulfur dioxides and other air  
24 toxins that aggravate asthma and other respiratory  
25

1  
2 problems. I know we have some people from the  
3 Lung Association here today that will testify to  
4 that and I'm grateful to have them here today.  
5 Any steps that New York City can take to improve  
6 local air quality and help out the many people in  
7 New York City that have asthma must be taken  
8 seriously. Biofuels also play a part in New York  
9 City's ongoing effort to reduce its carbon  
10 emissions. As many people know, we did the 2007  
11 New York City Climate Protection Act, which I was  
12 the author of, which is going to reduce our carbon  
13 emissions in New York City 30% in the government  
14 sector by 2017 and 30% overall in New York City by  
15 2030. Biofuels can certainly help us do that. In  
16 spite of the promise of biofuels though, a recent  
17 controversy, which many of us know about, has led  
18 many policy thinkers to rethink how biofuels  
19 should be incorporated into energy policy. It's  
20 caused some people to think that they should be  
21 left out of energy policy altogether. I don't  
22 hold that view, but there are people who think  
23 that. This controversy has revolved mainly around  
24 the impacts that biofuels have on both carbon  
25 emissions and global food pricing. We've seen

1 that in the media. Carbon emissions and food  
2 prices are both crucial issues for environmental  
3 and social sustainability. Certainly we all take  
4 these concerns very seriously. It is important,  
5 however, to look specifically at what biofuels New  
6 York City might use and to weight its costs and  
7 benefits carefully. Certainly the benefits we'll  
8 hear a lot about today. We're looking at the  
9 prospect through the use of a bioheat mandate of  
10 offsetting the burning of 200 million gallons a  
11 year of No. 2, No. 4 and No. 6 heating oil and the  
12 clean air benefits that would come from that in  
13 New York City are great. We'll hear more about  
14 that during the hearing. General statements about  
15 biofuels made obscure the specific issue  
16 surrounding biofuel use in New York City. There  
17 are people that confuse ethanol and things that  
18 are associated with ethanol with the diesel and  
19 bioheat uses that we want to do in New York City.  
20 First, the areas in which New York City may  
21 realistically increase the use of biofuels are in  
22 city-owned or city-operated vehicles and in home  
23 heating oil. Although these applications would  
24 involve using biodiesel blends, not ethanol or  
25

1  
2 other biofuels. So our concern and New York  
3 City's concern is mainly with the sustainability  
4 issues as they relate to biodiesel and bioheat.  
5 The controversy over ethanol may have tainted  
6 public perceptions of biodiesel because often the  
7 general term biofuels is used without specifying  
8 which fuel we're talking about. Nonetheless, many  
9 people remained concerned about the global impacts  
10 of biodiesel. Today's hearing is meant to clarify  
11 the issues that surround the use of biofuel in New  
12 York City and to try to figure out in practical  
13 terms what the real benefits and risks are for  
14 increasing the use of biodiesel. Witnesses with  
15 many perspectives on biofuels are here today. I  
16 ask you to focus your testimony on what New York  
17 City can do to ensure that its policy on biofuels  
18 is as sustainable as possible. As a backdrop, we  
19 know that New York City for the last two years has  
20 had a bioheat bill that we're trying to come to  
21 some sort of closure on. One sort of sticking  
22 point has been the issue of long-term  
23 sustainability of biodiesel and the feed stock  
24 that we would use to generate the B100 that we  
25 would use in our heating oil supplies. I thought



1  
2 that the best way to try to move this forward  
3 would be to have a hearing like this where all  
4 sides could come together and put the real facts  
5 on the table. Hopefully at the end of today's  
6 hearing we'll all have a better understanding of  
7 what the real issues are and what the real  
8 benefits that would accrue from using bioheat and  
9 more biodiesel in our city heavy duty vehicles.  
10 With that said, I'd like to call our first panel.  
11 We have representatives of the Bloomberg  
12 administration. We have Carter Strickland of the  
13 Office of Long-Term Planning and Sustainability.  
14 We also have a representative of the Department of  
15 Sanitation, Rocco DiRico. I figured we'd put all  
16 the folks from the Bloomberg administration on the  
17 first panel. Is that okay, Carter? Just Carter?  
18 The way we'll proceed is we'll have Carter  
19 Strickland of the Office of Long-Term Planning and  
20 Sustainability with whom I've had many  
21 conversations about biofuels and bioheat. As I  
22 said before, is emblematic of the Bloomberg  
23 administration's good faith approach to finding  
24 out the best use of biofuels in New York City. I  
25 thank you for all of your hard work. I thank you

2 for being here today. I thank you for many of the  
3 conversations that we've had and the value added  
4 that you're going to bring to today's hearing.

5 We'll do what we always do in our hearing. We  
6 swear in the witnesses and then you'll state your  
7 name for the record and then you can proceed with  
8 your good testimony. Thank you, Carter. Forgive  
9 me, I've lost my manners. We're joined by Council  
10 Member Crowley and Council Member Yassky. David  
11 is a great proponent of the bioheat as well. He  
12 and I have appeared on panels together. David has  
13 his own bill on this item. I'd like to thank  
14 Councilman Yassky for his great efforts and  
15 leadership on this issue specifically and biofuels  
16 generally. Thank you for being here, David.

17 We're also joined by Tom White of Queens. If the  
18 Counsel will swear in the witness then we can  
19 proceed. Please close the door out there so that  
20 we won't be distracted.

21 SAMARA SWANSTON: Would you please  
22 raise your right hand? Do you swear or affirm to  
23 tell the truth, the whole truth and nothing but  
24 the truth today?

25 CARTER H. STRICKLAND JR.: Yes.

2 CHAIRPERSON GENNARO: Carter, I  
3 just want to make sure I have a copy of your  
4 testimony before we proceed. Do you have a  
5 written statement?

6 CARTER H. STRICKLAND JR.: We do.  
7 Good morning, Chairman Gennaro and members of the  
8 Committee on Environmental Protection. I am  
9 Carter Strickland, Senior Policy Advisor for Air  
10 and Water with the Mayor's Office of Long-Term  
11 Planning and Sustainability. I'm testifying today  
12 on behalf of the Bloomberg Administration. Thank  
13 you for this opportunity to submit comments today  
14 on this important matter. At the outset I want to  
15 recognize the work of this committee and  
16 especially the leadership of Chairman Gennaro in  
17 crafting thoughtful and careful environmental  
18 policies. Today's hearing follows that tradition  
19 by allowing for detailed fact finding and a full  
20 airing of the complex issues surrounding the  
21 production and use of biofuels, particularly  
22 biodiesel, intended for blending with heating oil.  
23 In the interest of time and given all the  
24 witnesses that are here, I ask the Chairman's  
25 indulgence to depart from the text which you have

1  
2 and is available for everybody. I'll try to cut  
3 out some of the testimony and get to the heart of  
4 the matter. Our sustainability plan, PlaNYC  
5 adopts the goal of having the cleanest air of any  
6 major U.S. city by 2030. We're out of attainment  
7 for PM 2.5 and ozone. To address this problem we  
8 have a number of initiatives to reduce emissions  
9 from on-road and off-road vehicles, construction  
10 vehicles, power plants and other local sources.  
11 We also have several initiatives to clean up the  
12 heating fuel sector, which is responsible for up  
13 to a third of locally emitted fine particulate  
14 matter, or PM 2.5. It also produces a lot of  
15 nitrogen oxides, or NOx, and I'll call it, which  
16 is a precursor to ozone formation. We also note  
17 that the emission of heavy metals from the  
18 combustion of heavy or residual grades of heating  
19 oil creates a significant threat to public health.  
20 The use of biodiesel blends is one possible  
21 approach to lowering the local emissions of  
22 certain pollutants from heating oil because the  
23 base biodiesel stock does not contain sulfur,  
24 among other contaminants. A blend of 5% biodiesel  
25 will reduce sulfur levels by approximately 5% with

1  
2 some variation due to the lower energy content of  
3 biodiesel and therefore the need to burn more of  
4 the blended fuel than straight petroleum.

5 Accordingly, for No. 2 oil that is allowed to  
6 have, under City Law, up to 2,000 parts per  
7 million sulfur, a B5 blend would reduce allowable  
8 sulfur content to around 1,900 parts per million.

9 A B10 blend would reduce sulfur to 1,800 and a B20  
10 blend would reduce sulfur to 1,600 parts per  
11 million. These reductions would be an improvement  
12 over current levels but would not come close to  
13 the reductions that could be achieved through a  
14 sulfur cap of 500 parts per million or lower.

15 Since transportation fuels already have lower  
16 sulfur limits, down to 15 parts per million, the  
17 use of biodiesel blends has a negligible effect on  
18 PM 2.5 levels and is reported in some instances to  
19 increase NOx emissions. Now that's just the  
20 pollution reduction side. There are some other  
21 reasons to adopt biodiesel.

22 CHAIRPERSON GENNARO: But also the  
23 NOx would be for over the road vehicles and not  
24 for heating oil applications. Is that right?

25 CARTER H. STRICKLAND JR.: In the

1 heating oil application, NOx reductions do occur.  
2 Nevertheless, to test the feasibility of biodiesel  
3 blends and to support an infant industry that  
4 shows some promise to reduce emissions and our  
5 dependence on petroleum, the administration has  
6 committed to using a B5, 5%, in No. 2 grade  
7 heating oil blend in municipal boilers and also to  
8 use biodiesel and ultra-low sulfur diesel blends  
9 in certain of its agency heavy truck fleets. I  
10 want to recognize the leadership of the Sanitation  
11 Department and the Parks Department in  
12 spearheading those efforts and trying blends of up  
13 B50 in some cases. The administration is also  
14 piloting at a Sanitation facility the use of a B20  
15 No. 6 heating oil blend with the assistance of  
16 some researchers from Brookhaven. The  
17 administration, however, is not yet ready to  
18 support a broader mandate, a citywide mandate, for  
19 the blends of biodiesel and heating oil because of  
20 open questions regarding sustainability,  
21 operations and supply. We are also concerned that  
22 prescriptive technology-based standards focused on  
23 biodiesel alone may be less preferable than  
24 performance-based standards that are open to all  
25

1  
2 fuels or other approaches that will reduce  
3 pollution. First, the sustainability of biofuels  
4 feedstocks is an unresolved issue that has  
5 attracted policymaker's attention around the  
6 world. All of us want to do the right thing  
7 without adopting a cure that is as bad as the  
8 disease. There are no national standards for the  
9 sustainability of biofuels. Typically, but not  
10 exclusively, sustainability is measured in the  
11 embedded carbon or carbon footprint of different  
12 fuels from different sources. Over the past year,  
13 publications by Timothy Searchinger and others  
14 have started an important policy discussion about  
15 the unintended consequences of biofuels policies.  
16 These papers have hypothesized that the demand for  
17 biofuels in the United States and other countries  
18 and the demand for food displaced by biofuels  
19 production will cause widespread deforestation and  
20 other so-called indirect land use impacts. Some  
21 deforestation may occur in tropical rain forests  
22 where clearing can release significant amts of  
23 carbon into the atmosphere, but all agriculture  
24 production involves the release of carbon into the  
25 atmosphere. Scientists have also cited the great

1  
2 use of fertilizer and water in biofuel crops.  
3 These criticisms have been taken up by the Union  
4 of Concerned Scientists, the Natural Resource  
5 Defense Council and other groups. These critiques  
6 of biofuels are not uniformly accepted, as we  
7 expect you will hear today in detail from other  
8 speakers. In particular, many researchers,  
9 scientists and other trade groups have noted the  
10 uncertainty in attributing indirect land use  
11 change to biofuels as opposed to the growth in  
12 population, demand for meat, timber extraction,  
13 internal migration, suburbanization and other land  
14 use changes. They have questioned the assumptions  
15 made about the elasticity in food demand, land  
16 productivity and land conversion. They have  
17 pointed out that the indirect effects of the  
18 exploration, production and development of  
19 petroleum fuels has not been calculated. Clearly  
20 there are significant differences of opinion among  
21 qualified parties on critical issues. This debate  
22 has suspended or slowed many biodiesel initiatives  
23 by cities, states and even several European  
24 countries because many existing biofuels mandates  
25 did not have provisions or mechanisms to address



1 sources or sustainability. For example, the 2006  
2 New York State Executive Order that required state  
3 agencies to use biodiesel and the 2007 Maine law  
4 that instituted alternative fuel vehicle rebates  
5 and grants did not address sources or  
6 sustainability. Other states, such as  
7 Pennsylvania, Virginia, Illinois and Minnesota  
8 have enacted biofuels legislation that promotes  
9 the use of domestic or in-state biofuels through  
10 incentives or triggers based on attaining certain  
11 thresholds of in-state production. These laws  
12 address sourcing to some degree, but not in the  
13 way that would allow for consideration of indirect  
14 land use effects. More recent biofuels  
15 initiatives do incorporate sustainability  
16 standards that are objective, enforceable and part  
17 of a comprehensive quality assurance system. It  
18 is worth pointing out that the biodiesel industry  
19 has not adopted or enforced sustainability  
20 standards or labeling protocols as exist in  
21 limited for tropical hardwoods and fish and are  
22 helping the city make decisions in those fields in  
23 its purchasing for example of tropical hardwoods.  
24 In early February 2009, the National Biodiesel  
25

1  
2 Board announced that it had adopted sustainability  
3 principles. While we applaud this initial step,  
4 it is not yet evolved into a self-policing  
5 independently verified labeling regime that allow  
6 purchasers to meet sustainability criteria. The  
7 National Biodiesel Board has acknowledged the need  
8 to elaborate on those principles. We think that  
9 the experience of Massachusetts is instructive. In  
10 July 2008, that state enacted a statewide mandate  
11 for using blends of alternative fuels and heating  
12 oil starting at a 2% statewide mandate in 2010.  
13 The initial drafts of that statute and oddly  
14 enough, the version signed by Governor Patrick had  
15 required that such fuels be made from feedstocks  
16 that are grown in a sustainable manner. After  
17 concerns about the enforceability of that vague  
18 provision were raised, the final statute passed by  
19 the legislator required that eligible fuels  
20 achieve a 50% reduction in lifecycle greenhouse  
21 gas emissions. It is not yet clear how  
22 Massachusetts will establish or enforce that  
23 standard. It is clear, however, that  
24 Massachusetts is following the lead of the U.S.  
25 Congress. In December 2007, Congress enacted the

1  
2 Energy Independence and Security Act and set a  
3 graduated schedule for biodiesel or other biofuels  
4 to comprise a certain percentage of the road fuels  
5 that we use. The Act required that the fuels much  
6 achieve at least a 50% reduction in lifecycle  
7 greenhouse gas emissions compared to petroleum.

8 Congress directed the EPA to make those  
9 determinations for various fuel sources and to  
10 include any significant indirect emissions from  
11 land use changes and other factors. The EPA with  
12 its legions of scientists has struggled to develop  
13 a methodology for quantifying lifecycle greenhouse  
14 gas emissions and failed to meet a December 19,  
15 2008 deadline for finalizing its regulations. We  
16 understand that draft EPA regulations may be  
17 released in the near future, but given the way  
18 these things go, final regulations are probably a  
19 year or two away. Upon the completion of EPA's  
20 rule making, there will be national low carbon  
21 fuel standards. The other major effort underway  
22 is by the California Air Resources Board, or CARB.  
23 That effort has national significance because of  
24 the unique status that California has in  
25 developing clean air policy in the United States.

1  
2 In January 2007, the governor of California issued  
3 an executive order requiring a 10% reduction in  
4 lifecycle greenhouse gas emissions for its  
5 transportation fuels and ordered CARB to issue  
6 regulations by 2010. Over the past year, CARB has  
7 investigated these issues for different pathways.  
8 CARB's so-called well to wheels analysis includes  
9 various factors related to sustainability, fuel  
10 co-products and the uncertainty that are fed into  
11 complex models. CARB has completed its  
12 preliminary analysis for some pathways, including  
13 Midwestern soybeans to biodiesel, which it in  
14 January 2009. However, CARB's preliminary  
15 conclusions do not include indirect land use  
16 changes. CARB has not yet released its model for  
17 calculating land use impacts. The land use issue  
18 has caused New York State to pull back on  
19 additional initiatives for biofuel production and  
20 use, including the possible uses of biofuels as a  
21 strategy to comply with the cap and trade regime  
22 that was imposed by RGGI, the Regional Greenhouse  
23 Gas Initiative. It has launched an interagency  
24 effort to assess the sustainability of biofuels in  
25 the Northeast. That is being led by NYSERDA, New

1  
2 York State Energy Research and Development  
3 Authority, the Department of Agriculture and the  
4 Department of Environmental Conservation. New  
5 York and other Northeast states have also asked  
6 Northeast States for Coordinated Air Use  
7 Management, or NESCAUM, to develop an effective  
8 regional strategy to reduce the carbon intensity  
9 of fuels. NESCAUM is working on a low carbon fuel  
10 standard which will be specific to what's  
11 available in the Northeast. It's clear to us that  
12 NESCAUM's effort is motivated in part by the  
13 recent Massachusetts law which directed that state  
14 to use all available information and best  
15 practices. We presume that Massachusetts  
16 legislator had in mind the EPA, CARB and NESCAUM  
17 efforts. It is our belief that New York City  
18 should wait for the scientific understanding of  
19 sustainability issues to mature and for the  
20 completion of national system for determining low  
21 carbon fuel standards for biodiesel and heating  
22 oil blends. In advance of those developments is  
23 it not clear how New York City would adopt or  
24 enforce sustainability standards for biofuels or  
25 obtain the resources to administer a complicated

stand-alone sustainability system for biodiesel. To briefly run over three addition concerns, we have continued operational concerns that relate to the available or lack of available of detailed specification for fuel oil. We rely on national standards to make our purchases. It's our understanding that the American Society for Testing and Materials has adopted new specifications for B6 to B20 blends. But there is not ASTM specification for biodiesel blends with the heavy grades of No. 4 or 6 heating oil that emit much of the pollution in New York City. These national specifications are important because boiler manufacturers rely on them to determine the scope of their warranties. Right now we're aware of one manufacturer, Beckett, of boilers that said they will honor warranty coverage for biofuels up to B5 with No. 2 heating oil. Other manufacturers are studying the matter. Because the ASTM standards for B6 to B20 blends with No. 2 oil only recently came out, manufacturers are looking at that and are conducting their own testing to determine whether the scope of warranties can encompass those

1  
2 blends. The warranties are important because  
3 biodiesel is a solvent and can degrade o-rings,  
4 gaskets, pump seals, hoses and other components of  
5 heating oil systems that contain natural rubbers.  
6 At least initially though it will free up some  
7 clogging in the system created by the past use of  
8 biodiesel and clogged filters that's overcome with  
9 proper maintenance. For higher blends than B20,  
10 which is not under contemplation by the Council,  
11 special tanks and vessels are required. There are  
12 also some maintaining concerns about the  
13 degradation of heating oil when stored for a long  
14 time, which is important in New York City. We  
15 have to make sure that the supply of biodiesel in  
16 the storage tanks and other local infrastructure  
17 required to store and distribute biodiesel is  
18 sufficient to met mandated levels. We're informed  
19 by an experience we had in recent weeks where the  
20 city's supplier of B5 and ultra-low sulfur diesel  
21 for our truck fleet was unable to meet delivery  
22 obligations because of infrastructure problems and  
23 fuel line issues at the Stuyvesant terminal in the  
24 Bronx that supplier stepped up and at their own  
25 cost supplied alternative fuel and we commend them

1  
2 for that. But it's an instructive lesson about  
3 the limitations of the supply. Storage  
4 infrastructure must be sufficient to handle  
5 significant spikes and short-term demand that can  
6 be caused by the requirement of tariffs for  
7 interruptible gas service.

8 CHAIRPERSON GENNARO: Carter, if I  
9 can just jump in for a second. If we could have  
10 some order in the room please and close the door  
11 leading out to the hallway. This man has good  
12 things to say and we should hear them.

13 CARTER H. STRICKLAND JR.: When  
14 utilities in cold weather, when they issue  
15 constraint notices to their interruptible  
16 customers, users have to step up and have either a  
17 ten-day supply onsite or contracts in place. We  
18 anticipate a rush to market for their backup fuel.  
19 A fundament concern relates to the structure of  
20 the pending proposals. A biodiesel mandate would  
21 be a departure from fuel neutral performance  
22 standards and would essentially pick one solution,  
23 biodiesel blends, rather than renewable diesel,  
24 other fuels or even non-fuel solutions. Again,  
25 Massachusetts statewide mandate is instructive.



1  
2 As originally drafted, it referred exclusively to  
3 biodiesel. But the final law refers to "eligible  
4 petroleum distillate substitute fuels" that meet  
5 certain greenhouse gas reduction standards. To be  
6 sure, the city has adopted technology rather than  
7 performance approaches in recent diesel retrofit  
8 laws and other environmental laws. And the use of  
9 technology standards in appropriate circumstances  
10 can lead to easier enforcement and implementation.  
11 But as a general matter, performance standards are  
12 preferable because they lead to flexible and cost-  
13 effective solutions. For example, one of the  
14 city's most successful pollution control laws, the  
15 mid 1960s cap on sulfur content in fuels, has  
16 endured for decades through shifts in fuel mixes  
17 because it is technology neutral. In the heating  
18 oil sector, additional and lower sulfur caps would  
19 continue that legacy. Efforts are underway in  
20 Northeast states to adopt low sulfur rules. While  
21 sulfur levels are the principle reason that  
22 heating oil creates pollution, heating oil  
23 contains other pollutants that could and should be  
24 addressed. We look forward to continuing to work  
25 closely with this Council and this Committee in

2 particular to develop sound environmental policy.

3 I thank you for the opportunity to testify today  
4 on this important matter.

5 CHAIRPERSON: GENNARO: Thank you,  
6 Carter. I'm happy that you could be here today.  
7 Before we start our comments and questions of your  
8 statement, we have a little bit of housekeeping to  
9 do. We have members here that have other  
10 committee meetings. While we have a quorum of the  
11 Committee on Environment Protection, we're just  
12 going to take two minutes to do a little  
13 housekeeping. Everyone just stay in place. Let  
14 me just recognize some of the other Council  
15 Members who have come in since I last recognized  
16 members. We have Council Member de Blasio from  
17 Brooklyn, Council Member Eugene from Brooklyn,  
18 Council Member Gerson from Manhattan, Council  
19 Member Koppell from the Bronx, Council Member  
20 Mark-Viverito from Manhattan and Council Member  
21 James from Brooklyn. I thank everyone for being  
22 here. I have a statement, Samara, regarding this.  
23 This would be it. I'm sorry, Tom, I mentioned you  
24 when you first sat down.

25 COUNCIL MEMBER WHITE: Oh, you did?

2 CHAIRPERSON: GENNARO: Yeah, I did.  
3 I'll mention you again. Tom and I share a border.  
4 It's an open border. It's all good. Today the  
5 Committee is going to have a vote on Proposed  
6 Intro 991-A and on Proposed Intro 684-A. Intro  
7 684-A relates to wetlands protection and Intro  
8 991-A is an air quality bill. Proposed Intro 991-  
9 A and Proposed Intro 684-A previously had  
10 hearings. Based on the public testimony received  
11 and discussions with the stakeholders, the bills  
12 were revised and we're going to have a vote today  
13 on these bills. Proposed 991 mandates  
14 coordination among agencies having jurisdiction  
15 over wetlands and inland water sensitive areas.  
16 The Department of Environmental Conservation, the  
17 Army Corps of Engineers, as well as other agencies  
18 have jurisdiction over wetlands. With the  
19 different agencies that may require permits or  
20 approvals for development in or near New York City  
21 wetlands coordination is key to making sure that  
22 all appropriate permits and approvals are obtained  
23 in order to prevent damage to the wetlands. The  
24 future of New York City's remaining wetlands  
25 depends on all of us and our commitment to work

1  
2 together to protect what is left. I'll just  
3 mentioned anecdotally that we have a wetlands bill  
4 that we're here putting forward, my own wetlands  
5 bill that we're working in concert with the  
6 administration on and I'm happy to have their  
7 cooperation on that and their commitment to  
8 getting that done. That's just a sidebar there.  
9 The bill before us acknowledges that the efforts  
10 to regulate wetlands management must be  
11 coordinated among the agencies that have  
12 jurisdiction over wetlands and underwater lands  
13 and provides a straightforward approach to the  
14 coordination between the agencies. As I recall,  
15 the coordination bill was an Al Vann bill,  
16 correct?

17 SAMARA SWANSTON: That's right.

18 CHAIRPERSON: GENNARO: Proposed  
19 Intro 684-A by Council Member Gerson continues to  
20 expand the number of industries and users required  
21 to use ultra low sulfur diesel fuel and  
22 alternative fuels in New York City. Proposed  
23 Intro 684-A requires the use of ultra low sulfur  
24 diesel fuel or alternative fuel in diesel-powered  
25 generators used in the production of films, TV

1  
2 programs and ads and at street fairs in New York  
3 City. The bill was amended by removing the best  
4 available retrofit technology for generators and  
5 adding to the bill street fair generators. The  
6 penalties were lowered from \$5,000 to \$500 in  
7 response to comments on the penalties. The bill  
8 was made applicable to all generators and not just  
9 those 50 horsepower and over. The bill permits  
10 the use of alternative fuels so long as it is not  
11 more polluting than the ultra low sulfur diesel  
12 fuel. The author of 684-A, Alan Gerson, has  
13 called upon me to make a very, very short  
14 statement. I do appreciate that because we've got  
15 many people that are here to testify. I recognize  
16 Council Member Gerson for a brief statement.

17 COUNCIL MEMBER GERSON: Mr. Chair,  
18 I had prepared a very short statement, but Council  
19 Member Recchia is here telling me I need to speak  
20 at great length.

21 CHAIRPERSON: GENNARO: Thank you,  
22 Domenic. I owe you.

23 COUNCIL MEMBER GERSON: But  
24 actually the bill speaks for itself. You  
25 explained the changes. So let me just thank you,

1  
2 Mr. Chair, for your vision and for your  
3 leadership. Let me acknowledge the great work, as  
4 always, of Samara Swanston, the input and the  
5 leadership of all of the co-sponsors, including  
6 Council Member Koppell present and the work of our  
7 Director of Legislation Peter Pastor and let me  
8 also acknowledge and thank the input and the  
9 support of the Department of Environmental  
10 Protection, Gerry Kelpin in particular and the  
11 Mayor's Office and Eddie Bautista in particular.  
12 This will continue this Council's efforts to make  
13 the air more breathing safe for all lungs of all  
14 New Yorkers. Thank you very much, Mr. Chair. Is  
15 that brief enough?

16 CHAIRPERSON: GENNARO: That was  
17 great.

18 COUNCIL MEMBER GERSON: I could add  
19 on.

20 CHAIRPERSON: GENNARO: Nice try.  
21 Thank you, Alan. I will recognize that this is  
22 the latest in several bills that you've done and  
23 have gotten through this committee relating to the  
24 use of clean fuels. It would take me a couple of  
25 minutes to talk about all of your other bills that

2 you've done in this regard to getting people to  
3 use clean fuels. I thank you for that. I wish to  
4 recognize the presence of Council Member Recchia,  
5 who has joined us. We're going to be coupling the  
6 Proposed Intro 991-A and Proposed Intro 684-A.  
7 We're going to have a coupled vote on that. With  
8 that said, I would ask the counsel to call the  
9 roll and the chair urges a yes vote.

10 WILLIAM MARTIN: William Martin,  
11 Committee Clerk, Committee on Environmental  
12 Protection.

13 CHAIRPERSON: GENNARO: Sorry,  
14 Billy, I didn't see you here. Billy, where are  
15 you?

16 WILLIAM MARTIN: I'm testifying.

17 CHAIRPERSON: GENNARO: Okay, great.  
18 Billy ordinarily calls the roll and I didn't see  
19 you here, Billy. Thanks.

20 WILLIAM MARTIN: Council Member  
21 Gennaro?

22 CHAIRPERSON: GENNARO: Yes.

23 WILLIAM MARTIN: De Blasio?

24 COUNCIL MEMBER DE BLASIO: Yes.

25 WILLIAM MARTIN: Koppell?

2 COUNCIL MEMBER KOPPELL: Yes.

3 WILLIAM MARTIN: Recchia?

4 COUNCIL MEMBER RECCHIA: Yes.

5 WILLIAM MARTIN: Mark-Viverito?

6 White?

7 COUNCIL MEMBER WHITE: I'd like to  
8 vote yes on both and please add my name to 684-A.

9 WILLIAM MARTIN: Eugene?

10 COUNCIL MEMBER EUGENE: Yes.

11 WILLIAM MARTIN: Crowley?

12 COUNCIL MEMBER CROWLEY: Yes.

13 WILLIAM MARTIN: By a vote of seven  
14 in the affirmative, zero in the negative and no  
15 abstentions, both items have been adopted.  
16 Members, please sign the committee reports. Thank  
17 you.

18 CHAIRPERSON: GENNARO: Thank you,  
19 Billy. Also what we'll do is we'll hold the roll  
20 open in order to permit members of the  
21 Environmental Protection Committee who weren't  
22 here so far to vote on this item. We'll hold that  
23 open. Members will sign the committee report.  
24 Now we're back to business here. Carter, it would  
25 ordinarily be my response to engage in a lot of



1  
2 back and forth and have a little debate with you.  
3 I'm going to refrain to doing a lot of that  
4 because you and I can kind of do that any time.  
5 We have people in the room who are going to be  
6 putting forward testimony both supportive of what  
7 you had to say and people who are not in agreement  
8 with your position. I would ask the speakers who  
9 are coming forward to take note of some of the  
10 points that Mr. Strickland made in his testimony  
11 and speak to that. It is my belief, rather than  
12 engage in a lot of back and forth, that the need  
13 to reduce by 200 million gallons a year of No. 2,  
14 No. 4 and No. 6 oil and the air quality benefits  
15 that we would receive from that, I think that is  
16 paramount. I think it's something that New York  
17 City has to figure out a way to get done in the  
18 most sustainable way possible. I think there is  
19 clearly a roadmap to do that that exists right  
20 now. I think a lot of good folks are trying to do  
21 the best that they can with some of the  
22 sustainability issues that need to be considered.  
23 I think that jurisdictions that are much larger  
24 than New York City, like the USA as a whole, or  
25 the State of California, or the European Union,

1  
2 their use of biofuels are certainly globally  
3 significant. I don't think that the 200 million  
4 gallons a year that New York City would use is a  
5 globally significant amount of B100. I just don't  
6 think it's possible for New York City to go out of  
7 its way to use the least sustainable B100  
8 feedstock that is could possibly use, which of  
9 course we would not seek to do, but even if that  
10 were our mission, I defy anyone to show how the  
11 use such a feedstock for the amount that we would  
12 use would have any global significance whatsoever.  
13 That being said, we would, of course, not pursue  
14 the least sustainable feedstocks. We would do  
15 everything that we could do to make sure that  
16 we're using the best fuels possible. We would get  
17 the clean air benefits that we need right away. I  
18 think we're going to hear about how difficult it  
19 is and how long we would have to wait before we  
20 had sort of the perfect solution and every year  
21 that we defer the implementation of this we're  
22 burning hundreds of gallons of No. 2, No. 4 and  
23 No. 6 than we need to burn. I think there's a way  
24 to get it done. I think there's a way to get it  
25 done now. You've graciously indicated your

1  
2 willingness to stay and here all of the testimony  
3 that's going to be put forward today. I've  
4 already directed the witnesses to speak directly  
5 to the points that you made. I may or may not ask  
6 you another question right now before I move on to  
7 the next panel, but Council Member Yassky has  
8 indicated a desire to be recognized. I'm happy to  
9 recognize him. He's done a lot of work in this  
10 regard. I recognize Council Member Yassky for a  
11 statement or question or whatever you want to do,  
12 David.

13 COUNCIL MEMBER YASSKY: Mr. Chair,  
14 thank you so much. I'm co-chairing a hearing  
15 across the street, so I'm going to beg your  
16 indulgence to leave. I just really wanted to be  
17 here to thank you for your leadership and commend  
18 it and lend my support to this effort. I will  
19 follow your lead and not engage in back and forth.  
20 I agree the most useful thing will be to hear from  
21 the subsequent experts you will hear from. I will  
22 just echo what you just said. I do think that the  
23 position articulated by Mr. Strickland is just  
24 wrong and that it's delaying the good to say that  
25 because you don't have the perfect way to do it

1  
2 that we could legislate right this second that we  
3 shouldn't do something that would make clear real  
4 progress. It reminds me when George Bush every  
5 year would get up and say; let's not have higher  
6 fuel economy standards for cars because what I  
7 really want to do is do the perfect car ten years  
8 down the road. That leaves us exactly where we  
9 are, which is a mistake. Mr. Chair, I commend you  
10 for your leadership and I look forward to working  
11 with you on this.

12 CHAIRPERSON: GENNARO: Thank you,  
13 Council Member Yassky. Thank you for your  
14 advocacy. I greatly appreciate your voice in this  
15 discussion. If I tiptoe down that road of  
16 starting to engage you in colloquy, Carter, as  
17 much as I do enjoy that, I feel like I'll be doing  
18 a disservice to some of the good people that we  
19 would like to bring forward who will speak in  
20 their own expert way to some of the points that  
21 you make. By no way, shape or form, do I wish to  
22 indicate to you or to anyone that my lack of  
23 questioning and challenge to your statement  
24 reflects in any way that I stand with it or that I  
25 agree because I don't. But as I said, you and I

1  
2 can have this discussion any time. But I would  
3 like to thank you and the Mayor's Office of Long-  
4 Term Planning and Sustainability for your absolute  
5 good faith efforts to do what you think is best in  
6 the interest of the people of New York City. I  
7 know of the conversations that you've had with the  
8 experts that we have brought forward. We will  
9 continue to try to convince you. I thank you for  
10 being here to listen to some of the good testimony  
11 that's going to come forward. It's always a  
12 pleasure to work with you. I look forward to  
13 many, many fruitful collaborations in the future,  
14 starting with this one. With that said, I'll ask  
15 you to stand down. Thank you once again, Carter.  
16 We'll call the next panel, which is Mr. Shelby  
17 Neal and Mr. Don Scott. Shelby Neal is Director  
18 of State Government Affairs for the National  
19 Biodiesel Board. Don Scott is the Director of  
20 Sustainability for the National Biodiesel Board.  
21 That panel will be followed by Mr. Pierre Bull of  
22 the National Resources Defense Council and Ms.  
23 Christina Schiavoni of World Hunger Year. That'll  
24 be the panel that will be on deck. I ask the  
25 Counsel to the Committee to swear in the panel.

1  
2 SAMARA SWANSTON: Gentlemen, would  
3 you please raise your right hands? Do you swear  
4 or affirm to tell the truth, the whole truth and  
5 nothing but the truth today?

6 SHELBY NEAL: Yes.

7 DON SCOTT: Yes.

8 CHAIRPERSON: GENNARO: Thank you,  
9 gentleman. Is there one statement or two  
10 statements?

11 SHELBY NEAL: We each have one.

12 CHAIRPERSON: GENNARO: You each  
13 have a statement. Mr. Neal I received your  
14 statement in my hand first, so why don't we start  
15 with you?

16 SHELBY NEAL: Mr. Chairman, thank  
17 you for having us here today. Before I get  
18 started, I would be remiss if I didn't thank you  
19 for your leadership on biodiesel issues as well as  
20 a broad range of environmental issues. We at the  
21 Biodiesel Board are first environmentalists and  
22 second, members of the biodiesel industry, so we  
23 sincerely appreciate that. As you mentioned, Mr.  
24 Chairman, my name is Shelby Neal. I serve as the  
25 Director of State Governmental Affairs. The NBB,

1  
2 as some of you may know, serves as the trade  
3 association that represents the biodiesel  
4 industry. In this capacity, I've been involved in  
5 a number of sustainability and low carbon fuel  
6 standard efforts, including the California effect.  
7 I serve on an advisory committee that's advising  
8 the Midwestern Governors Association on a low  
9 carbon fuel standard. And just next week, in  
10 fact, have been invited to testify before NESCAUM  
11 on the process moving forward here in the  
12 Northeast. So I hope that I can bring some of  
13 this experience with me here today. As a member  
14 of NBB, I'm going to do something that's a little  
15 odd for us and I'm not going to talk about any of  
16 biodiesel's benefits. We're actually going to  
17 address a number of the concerns that have risen  
18 in the past year or so, primarily as a result of  
19 Time magazine, which was some work based upon a  
20 gentleman from Princeton University, Timothy  
21 Searchinger, an attorney. On March 27, 2008, Time  
22 magazine published an issue featuring an ear of  
23 corn on the cover with the caption, "The Clean  
24 Energy Scam." That was not a good day in the  
25 office. The article, based on Princeton

1  
2 University Attorney Tim Searchinger, asserted that  
3 biofuels are accelerating global climate change.  
4 That biofuels are actually worse for the  
5 environment than petroleum. It was also asserted  
6 that a global food crisis was occurring because  
7 the increased use of biofuels is raising the price  
8 of commodities. The article even suggested that  
9 tortilla riots had broken out all over the country  
10 of Mexico as a result of the biofuels policy. For  
11 sure these are very serious charges. Although  
12 corn-based ethanol is clearly the target of the  
13 article, Searchinger's paper didn't mention  
14 biodiesel, not even once. Biodiesel, perhaps by  
15 mistake, I don't know, was mentioned in the Time  
16 article and so we're compelled to respond in the  
17 same manner that ethanol is. I want to first say  
18 that if these charges were true, the National  
19 Biodiesel Board would be the very first to do  
20 something about it. As I mentioned, we are  
21 environmentalists first. That's why we're here.  
22 That's why we're in this industry. So if this was  
23 true, we would be the first to do something about  
24 it. The biodiesel industry is not perfect. We  
25 have never said we're perfect. We never will be



1 perfect. But we will continue to strive to be the  
2 most sustainable fuel that's sold commercially in  
3 the United States, which is where we are today.

4 So, to be sure, converting rain forests for  
5 production of crops is not something that we  
6 support. It does not make sense. In the same  
7 manner, starving or malnutrition for our fellow  
8 human beings as a result of biofuels makes no  
9 sense. This is not something we support. But is  
10 it happening as a result of U.S. biofuels policy?

11 That's really the question. That's why we're  
12 here. Mr. Chairman, the best scientific data on  
13 the subject that exists today indicates that these  
14 charges are not correct. With regard to Mr.

15 Searchinger's paper, which was based on modeling  
16 done by the U.S. Department of Energy's Argonne  
17 National Labs, the DOE itself responded to the  
18 report by writing, "The Searchinger study is  
19 plagued with incorrect or unrealistic assumptions  
20 and obsolete data." The response went on to

21 detail a number of errors with the report. I  
22 won't mention all of them today because we have  
23 time constraints. A couple of the more obvious  
24 glaring mistakes was that Mr. Searchinger assumed  
25

1  
2 that 30 billion gallons consumption of ethanol  
3 would occur rather than the 15 billion that's  
4 called for in the federal RFS. So if you assume  
5 twice as much ethanol is going to be consumed and  
6 produced than is actually occurring that changes  
7 the number significantly. The other one is that  
8 over the course of the 167 years that the modeling  
9 occurred, he indicated that no increase, not one  
10 extra kernel of corn in yield would be increased  
11 over 167 years. This is not me; this is what the  
12 Department of Energy indicated. As I mentioned,  
13 there are other issues and if anybody would like  
14 that letter, I'd be happy to submit it to them. I  
15 think it's also important to point out that while  
16 Time magazine asserts that biodiesel is worse for  
17 the climate than petroleum-based diesel, to my  
18 knowledge, and I have to be corrected on this  
19 point, no government study or paper published by a  
20 scientific journal has come to that same  
21 conclusion. It appears that either through  
22 negligence or convenience, Time completely  
23 overlooked leading scientific thought on this  
24 issue. As proof of this statement, the 12  
25 institutions and governments that have conducted

1  
2 full lifecycle assessments for biodiesel have all  
3 concluded that biodiesel is at least 41% better  
4 than petroleum. The average of the study suggests  
5 that biodiesel is a little more than 60% better  
6 than petroleum. These sources are high  
7 respectable. They include the U.S. Department of  
8 Energy, the U.S. Department of Agriculture, the  
9 National Academy of Sciences, Argonne National  
10 Labs, the California Air Resources Board, National  
11 Resources Canada, the European Commission, the  
12 Dutch Ministry on Economic Affairs, the UK  
13 Department of Transport, the Australian  
14 Commonwealth and even the oil companies. British  
15 Petroleum, Total and Shell Oil sponsored a study  
16 that showed biodiesel's greenhouse gas emissions  
17 are 55% to 80% better than their own product.  
18 Nevertheless, in light of all of this evidence,  
19 Time magazine chose to publish a theory devised by  
20 an attorney at Princeton University that had not  
21 been peer reviewed and to this very day has not  
22 been validated with real world data. The other  
23 issue mentioned by Time is the idea that biofuels  
24 are causing commodity prices to raise out of  
25 control, which is causing food prices to spiral

1  
2 out of control, which is causing people to go  
3 hungry around the world. On this assertion, I  
4 want to be succinct by making just one point.  
5 Soybean prices over the last 12 months have  
6 decreased by 50% while biodiesel production has  
7 increased by 50%. The reason there is  
8 significantly less correlation between soybean  
9 prices and biodiesel product that Time asserts is  
10 because current U.S. biodiesel production only  
11 requires a little more than 8% of the U.S. soybean  
12 crop. A 5% bioheat mandate in New York City would  
13 require than four-tenths of one percent of the  
14 nation's soybean crop. If you include the amount  
15 of waste grease that's available in the New York  
16 City area, you're talking about two-tenths of one  
17 percent of the nation's soybean crop. This is to  
18 say nothing of the fact that 80% of the soybean is  
19 actually protein that goes exclusively into animal  
20 feed. The other 20% is the actual oil that goes  
21 into biodiesel and healthy products like Twinkies  
22 and Snickers. Needless to say, we're still  
23 working to repair the damage done by this single  
24 article, which has spawned dozens, maybe hundreds  
25 of news articles. But while we're doing this,

1  
2 we're trying to get ahead of the curve. We're  
3 also working to educate people about other aspects  
4 of sustainability that are important with regard  
5 to our industry. I'll go over just a couple of  
6 those. In terms of water use, the entire U.S.  
7 biodiesel production industry uses less water than  
8 is required to irrigate two South Texas golf  
9 courses. On the crop side, soybeans require only  
10 one-fifth the amount of water corn does. And  
11 according to a joint U.S. DOE/USDA study,  
12 biodiesel produces 79% less wastewater than  
13 petroleum diesel production does and 96% less  
14 hazardous waste. I saw something on The Tonight  
15 Show the other day that indicates that soybean  
16 farmers are unsustainable. Well, the GHG-friendly  
17 no till practices increased from 6% to 22% from  
18 1990 to 2004. According to the US EPA, herbicides  
19 used today are ten times less toxic than those  
20 used before the 1990s. These apparently  
21 unsustainable practices from 1990 to 2002 have  
22 somehow yielded increases in yield from 34.1 to  
23 42.7 bushels per acre, which is to say nothing of  
24 the fact that most of this land has been in  
25 production for anywhere from 100 to 200 years

1  
2 already. Finally, it's important to remember that  
3 soybeans do not require nitrogen fertilizer.

4 Unlike corn, they make their own nitrogen  
5 fertilizer. You might say this sounds great, but  
6 what does it really mean? What's the bottom line?

7 How we quantify this typically is something called  
8 the energy balance. This is how many units of  
9 energy are required to produce a unit of

10 biodiesel. Fewer passes with the tractor over the  
11 field and fewer chemical applications mean less

12 petroleum used and less energy that goes into the  
13 production of a gallon of biodiesel. According to

14 NREL, or the National Renewable Energy Laboratory,  
15 biodiesel's net energy balance in 1992 was 3.2 to

16 1. Meaning it takes 1 unit of energy to produce  
17 3.2 units of biodiesel. By contrast, the product

18 that we're comparing biodiesel against, petroleum,  
19 according to the same survey registered in at 1

20 unit of energy to create .83 units of energy.

21 Meaning you pay a penalty to convert a btu of  
22 energy to petroleum. A USDA-funded study using

23 the same methodology was released just last month  
24 and that indicated the new energy balance is 4.56

25 to 1, meaning 1 unit of energy is needed to create

1  
2 more than 4 units of biodiesel. This is the  
3 highest energy balance of any commercial fuel made  
4 in the United States. And more to the point, it  
5 shows energy improvements of greater than 40% in a  
6 little over 15 years. Think of any industry  
7 that's become more than 40% efficient in 15 to 16  
8 years. I can't think of one. It shows the  
9 biodiesel industry's commitment to sustainability  
10 and how green we actually are. With that, Mr.  
11 Chairman, I realize we are short on time and I  
12 appreciate your indulgence and yield back whatever  
13 time I have if there are questions. Thank you.

14 CHAIRPERSON: GENNARO: Thank you,  
15 Mr. Neal. I appreciate your views and your  
16 testimony. We'll withhold questions or comments  
17 until we hear from your fellow panel member, Don  
18 Scott. Mr. Scott?

19 DON SCOTT: Thank you.

20 CHAIRPERSON: GENNARO: I'm sorry.  
21 You're a little too late on the draw, Mr. Scott.  
22 Thank you very much for being here. No, I'm  
23 kidding. We're going to let you talk, but Council  
24 Member Vallone wishes to vote on the coupled item  
25 that we have before us. Let me, of course;

2 recognize Council Member Vallone at this time and  
3 Council Member Mark-Viverito who is here. I  
4 thought that I had seen them listed here before.  
5 We'll take this opportunity to get their votes on  
6 the two bills. Is Bill still here? Bill, if you  
7 could call the roll for the two members.

8 WILLIAM MARTIN: Intro. 684-A and  
9 919-A, coupled items, Council Member Vallone?

10 COUNCIL MEMBER VALLONE: Thank you.  
11 I'd just like to explain that Council Member Mark-  
12 Viverito and I have been downstairs at an  
13 Education Committee hearing and we unable to catch  
14 the beginning of this hearing. I vote aye on all  
15 bills.

16 WILLIAM MARTIN: Mark-Viverito?

17 COUNCIL MEMBER MARK-VIVERITO: I  
18 vote aye.

19 WILLIAM MARTIN: Final vote on the  
20 two coupled items now stand at nine in the  
21 affirmative, zero in the negative and no  
22 abstentions. Thank you.

23 CHAIRPERSON: GENNARO: Thank you.  
24 I want to thank Council Member Vallone and Council  
25 Member Mark-Viverito for being here today for



1  
2 voting. With that said, we'll return back to the  
3 testimony of Mr. Scott. Mr. Scott, please?

4 DON SCOTT: Thank you very much. I  
5 appreciate the opportunity to testify before this  
6 committee today. My name is Don Scott. I serve  
7 as the Director of Sustainability for the National  
8 Biodiesel Board. I'm an environmental engineer  
9 with over a dozen years experience protecting  
10 natural resources. I gave up my position as Chief  
11 of Surface Water Resources for the State of  
12 Missouri and joined the biodiesel industry because  
13 I realized our society's most critical need is for  
14 renewable fuels that are environmentally friendly.  
15 We must transition to more sustainable  
16 alternatives to fossil fuels if we are to maintain  
17 our current standard of living that affords us the  
18 great strides we have made in this country  
19 protecting clean air and clean water. It is  
20 toward these goals that I offer my services to  
21 this industry and this committee. The U.S.  
22 biodiesel industry was founded a mere 15 years ago  
23 to offer a healthier homegrown fuel that can  
24 invigorate economies throughout the U.S. and  
25 increase energy independence. The U.S. biodiesel

1 industry has consistently sought to provide a  
2 sustainable solution to America's energy needs.  
3 Biodiesel offers significant greenhouse gas  
4 emissions reductions compared to its petroleum  
5 counterpart and has the greatest energy balance of  
6 any U.S. produced transportation fuel. This means  
7 biodiesel is the most sustainable alternative  
8 currently available for light duty vehicles, heavy  
9 equipment, freight, public transport buses and  
10 heating oil. The most comprehensive lifecycle  
11 inventory for biodiesel was conducted in 1998 by  
12 the United States Department of Agriculture and  
13 the Department of Energy. This analysis  
14 considered every bit of energy and associated  
15 greenhouse gas emissions emitted in the production  
16 of soy biodiesel. This included everything  
17 required to plant, grow, harvest, transport and  
18 crush soybeans, as well as the energy required to  
19 convert the surplus soybean oil to biodiesel and  
20 transport it to a retail fuel station. This  
21 inventory concluded that biodiesel use reduces  
22 greenhouse gas emissions by 78% compared to  
23 petroleum diesel. It can be expected that this  
24 reduction is also improving, just like the energy  
25

1  
2 balance is improving as a result of efficiency  
3 improvements in farming and biodiesel production.  
4 This reduction is obtained because the carbon  
5 emitted as biodiesel is burned was originally  
6 pulled from the atmosphere by a soybean plant. In  
7 effect, the carbon is being naturally recycled  
8 with no net addition of CO<sub>2</sub> to the atmosphere.  
9 This is in stark contrast to petroleum, which  
10 pulls carbon in the form of crude oil from deep  
11 within the earth's crust and spews that carbon  
12 into the air as it is refined or burned. It is  
13 this process of unlocking millions of years of  
14 sequestered carbon from buried fossil fuels that  
15 is responsible for 80% of human induced greenhouse  
16 gas emissions and is the leading cause of global  
17 warming that threatens our earth and our way of  
18 life. If we want to reverse global warming, we  
19 must find alternatives to fossil fuels. Reserving  
20 the impact of fossil fuels on climate change will  
21 not happen overnight. That is why we must begin  
22 to transition to renewable fuels immediately. We  
23 must also act quickly to protect human health. A  
24 20% biodiesel blend in heating oil can reduce  
25 nitrogen oxide emissions by 20% and reduce sulfur

1  
2 oxide emissions by 83%. Biodiesel in engines can  
3 reduce polyaromatic hydrocarbons, which have been  
4 identified as cancer causing compounds, by 50% to  
5 90%. B20 use can reduce the estimated risk of  
6 premature death due to air toxics by up to 5% in  
7 regions that use biodiesel. The original USDA/DOE  
8 lifecycle analysis was done on soy biodiesel  
9 production because soy was and remains our  
10 nation's largest available source of surplus  
11 natural oils. Biodiesel can be made from any  
12 undervalued vegetable oil or animal fat.

13 Considerable volumes of biodiesel are made from  
14 recycled cooking oil, especially in urban areas.  
15 Technology is blossoming for biodiesel made from  
16 waste greases. The New York City metropolitan  
17 area produces enough recycled cooking oil to make  
18 15 to 20 million gallons of biodiesel each year  
19 and enough waste grease to make an addition 30  
20 million gallons. Waste greases include sources  
21 such as restaurant grease traps. Removing these  
22 wastes from municipal wastewater streams has  
23 significant environmental benefits. The City of  
24 San Francisco, who is building a plant to convert  
25 waste grease to biodiesel, estimates that \$3.5

1 million in public works expenditures could be  
2 saved every year if they could eliminate sewer  
3 backups related to waste greases in their sewers.  
4 Alternative sources for biodiesel are growing in  
5 proportion to the total volume. The versatility  
6 of biodiesel to utilize the growing number of  
7 alternative sources while meeting a consistent  
8 ASTM specification for biodiesel, No. 2 diesel  
9 fuel and heating oil stimulates advancements like  
10 the development of renewable fuel from algae.  
11 Many biodiesel plants can use a variety of  
12 feedstocks, which helps their economic  
13 sustainability in times of fluctuating markets.  
14 Biodiesel is a great fuel now. Public support  
15 fosters its potential to get even better.  
16 Biodiesel is the most sustainable liquid fuel  
17 available today. And still one of its most  
18 compelling attributes is that this young industry  
19 has the opportunity to play an even greater role  
20 in the sustainable energy future. The U.S.  
21 biodiesel industry is not only generating a  
22 product with documented health and environmental  
23 benefits; it has aggressively committed to  
24 continually increase its sustainability. The  
25

1  
2 National Biodiesel Board has developed a  
3 sustainability taskforce and a set of  
4 sustainability principles to ensure the highest  
5 degree of sustainability for our country and our  
6 industry. These principles support biodiesel that  
7 significantly reduces greenhouse gases compared to  
8 petroleum, improves food security and protects  
9 natural resource such as soil, water and air.

10 Biodiesel made from a wide variety of materials,  
11 including soybeans, animal fats, recycled and  
12 waste greases and algae meet that standard. The  
13 National Biodiesel Board is not alone in focusing  
14 attention on the sustainability of biodiesel.

15 International organizations such as the Roundtable  
16 on Sustainable Palm Oil are implementing criteria  
17 for feedstock production to ensure that biofuels  
18 are neither causing nor being blamed for  
19 unsustainable practices associated with burning  
20 forests or illegal logging. Our objective is to  
21 ensure that the future will encourage new research  
22 and innovation, incorporate sound science and  
23 knowledge based on credible transparent data,  
24 create mechanisms for continual assessment and  
25 improvement and provide the opportunity for

1  
2 biodiesel to realize its full potential as a  
3 sustainable domestic energy source. Once again, I  
4 thank you for the opportunity to be here today and  
5 I thank you for your leadership on issues related  
6 to biodiesel. The written testimony that I have  
7 submitted includes the references to the  
8 scientific studies that measure biodiesel's  
9 environmental benefits. Thank you.

10 CHAIRPERSON: GENNARO: Thank you,  
11 Mr. Scott. Thank you, Mr. Neal. I'd like the  
12 staff to look at the prospects of how we might be  
13 able to continue this hearing past 1 o'clock and  
14 what we would do in terms of shuffling. I'd just  
15 like to take a look at that. See who's going to  
16 come in here at 1 o'clock and find out if there's  
17 someplace else we can put them. Why don't you  
18 have some fun with that while I do my job or  
19 whatever? Change the lock on the door too, so if  
20 it gets to be 1 o'clock, we'll have our own.

21 Jerry, you're working for us, so you're good past  
22 1 o'clock. Jerry's with us, so he's going to bar  
23 the door so the committee can't get in here.

24 Thank you, Jerry. Nick, you're going to work for  
25 the other team? How dare you. I won't engage in

1  
2 a lot of questioning like I did with Carter. You  
3 heard a lot of what Carter had to say and he's a  
4 pretty smart guy and he talks to a lot of people.  
5 Again, not to speak for Mr. Strickland, it's just  
6 like why don't we go to a standard that's not a  
7 technology-based standard but one that's simply a  
8 low carbon standard that's not specific on a  
9 certain technology. What would be your response  
10 to that? That's something that Mr. Strickland put  
11 forward and seems quite focused on. What would be  
12 your reaction to that?

13 SHELBY NEAL: I think that's a  
14 reasonable view and there are certainly merits to  
15 doing it that way. I really view mandates and low  
16 carbon fuel standards as different products. One  
17 isn't necessarily better than the other but  
18 they're just different. For example, a low carbon  
19 fuel standard is what most people mean when they  
20 refer to a performance-based standard. Do you  
21 know how many there are in the world operating  
22 right now? Zero.

23 CHAIRPERSON: GENNARO: What's zero  
24 you said? You mean places that have successfully  
25 implemented a low carbon fuel standard?



SHELBY NEAL: That's right.

California passed its original bill in 2006. That was followed up by an executive order by Governor Schwarzenegger, which implemented a low carbon fuel standard as an early action item. So they've been working on this conservatively since 2007 and are racing to try to get this half implemented by 2010, but really by 2011. So in my judgment you're talking about four years. And they have all of the resources in the world. They've staffed up with dozens and dozens of employees. That one study that we have contributed to was \$2.2 million and it's an ancillary study. It's not even related to the carbon. So in my judgment, even when you're talking about the greatest city in the world, New York City, and all the resources that you all have with the tremendous size, my personal opinion is that you could spend tens of millions of dollars trying to do this when you add up all of the regulatory burden, all the studies and so on. So in my judgment a mandate would be a better approach. Most places that I've seen the fiscal note on a mandate is zero to the state government. If you

1  
2 believe that biodiesel is a low carbon fuel then  
3 you have a low carbon fuel standard. In addition,  
4 biodiesel has significant benefits for human  
5 health. I sort of think in the carbon debate  
6 we've all forgotten about human health. It'd be  
7 nice to live to see the carbon changes if indeed  
8 they're going to occur. So when you talk about  
9 carbon monoxide and particulate matters, renewable  
10 diesel is a great product except that it doesn't  
11 do anything on those.

12 CHAIRPERSON: GENNARO: Renewable  
13 diesel?

14 SHELBY NEAL: Renewable diesel.  
15 Co-processed renewable diesel, which is a Conoco  
16 Philips product, or Neste, which is a good  
17 product, but it doesn't reduce particulate matter  
18 or carbon monoxide or any of the other carcinogens  
19 that biodiesel does.

20 CHAIRPERSON: GENNARO: But it would  
21 be low carbon.

22 SHELBY NEAL: It would be low  
23 carbon.

24 CHAIRPERSON: GENNARO: But it  
25 wouldn't give the clean air benefits. That's your

1  
2 point.

3           SHELBY NEAL: That's exactly right.  
4 That's my point. Now you could write that into  
5 the low carbon fuel standard but again, you've  
6 narrowed yourself back down to biodiesel which is  
7 where you start with a mandate. So in my judgment  
8 it might make sense to start with a mandate which  
9 would cost the state government zero and then wait  
10 for some of the northeast process to move forward  
11 with a low carbon fuel standard. But that's  
12 probably going to be, in my judgment, at least  
13 three and probably four years. So I'm not sure  
14 it's necessarily, with all due respect to Mr.  
15 Strickland, an either/or situation. It could be  
16 an "and" situation. So why not start now with a  
17 mandate and then in three to four years with the  
18 rest of the northeast states, move toward a  
19 performance-based low carbon fuel standard that  
20 includes particulate matter and all of the other  
21 human health benefits that biodiesel offers.

22           CHAIRPERSON: GENNARO: Thank you.  
23 Mr. Scott, I had made a point during my statement  
24 about the global significance of the amount of  
25 B100 that we would use here in New York City. I

1  
2 know that the briefing paper put forward for this  
3 hearing by the Council indicated that we may use  
4 up to 150 million gallons if we would go to a B20  
5 mandate. I think it would be more than that. I  
6 think we use more than 750 million gallons. Let's  
7 say we use a billion gallons of heating oil, which  
8 would push up to about 200 million gallons of B100  
9 that we would need. I had made the statement that  
10 I don't think that the 200 million gallons of B100  
11 has global significance. What's your belief on  
12 the global significance of that?

13 DON SCOTT: Shelby offered some  
14 percentages of what a small portion of the U.S.  
15 soybean crop that would go into creating that  
16 biodiesel. That's actually true for the entire  
17 U.S. industry. Our goal is to displace 5% of  
18 petroleum diesel by 2015. We can do that by using  
19 feedstocks that are all developed right here in  
20 the U.S. So with no direct need for new crops or  
21 imported feedstocks from other countries.

22 CHAIRPERSON: GENNARO: Thank you.  
23 In the interest of moving forward and while I am  
24 not going to take the opportunity to do it on the  
25 record and go through points that have been made,

1  
2 and I'll ask this of other witnesses too, maybe  
3 I'll give out some homework assignments. I'm  
4 going to submit some things to the Office of Long-  
5 Term Planning and Sustainability of some of the  
6 points that have been made by the pro-biodiesel  
7 panels and I'll ask for your critique. By the  
8 same token, I would ask you to look at the  
9 statement that was made by the Bloomberg  
10 administration through Mr. Strickland on some of  
11 their points. If I could have a critique of that  
12 for the deliberations, that would be most  
13 appreciated. Things that are in the statement  
14 here before you and any other issues that may come  
15 out. I'll ask the other panels to do the same  
16 thing. We've reached a new plateau with me so now  
17 I'm giving out homework. There will not be a quiz  
18 though. Class participation counts. Thank you  
19 very much for being here. Thank you for your  
20 testimony. If you could follow up on some of the  
21 points made in a statement by the administration  
22 because we could use those in our further  
23 deliberations. Mr. Neal and Mr. Scott, thanks  
24 very much for being here.

25 SHELBY NEAL: Thank you, Mr.

Chairman.

DON SCOTT: Thank you.

CHAIRPERSON: GENNARO: The next panel, as I said, is going to be Mr. Pierre Bull of NRDC and Christina Schiavoni of World Hunger year. That'll be followed by a scientific panel that would include John Nettleton of Cornell, Richard Nelson of Kansas State University and C. R. Krishna of Brookhaven National Lab. I'm assuming it could be Dr. Nettleton, Dr. Nelson and Dr. Krishna. Those are assumptions on my part. That'll be the next panel after this panel. The panel after the scientific panel will be the League of Conservation Voters and the American Lung Association. The sergeant-at-arms has indicated that if we go past 1 o'clock we might have to convene in Starbucks or whatever it is. So we'll have to commandeer Starbucks. I want to thank the panel for being here. If the Counsel to the committee could swear in the panel.

SAMARA SWANSTON: Please raise your rights hands. Do you swear or affirm to tell the truth, the whole truth and nothing but the truth today?

2 DON SCOTT: Yes.

3 CHAIRPERSON GENNARO: Thank you.

4 Do we have written statements from these  
5 witnesses? Please give that to the sergeant. Mr.  
6 Bull, do you have a written statement for  
7 distribution?

8 PIERRE BULL: Sorry, I don't have.

9 CHAIRPERSON GENNARO: No, that's  
10 quite all right. If you had one I would reference  
11 it. Mr. Bull, I called you first. I'd be happy  
12 to hear your testimony.

13 PIERRE BULL: Thank you, Mr.

14 Chairman, for the opportunity to share my views  
15 regarding the sustainability of biofuels. Again,  
16 my name is Pierre Bull. I am an energy policy  
17 analyst for the Natural Resources Defense Council.  
18 Because my colleagues Nathanael Greene and Richard  
19 Kassel cannot be with you today, I am happy to  
20 testify in their place. On behalf of all of us,  
21 thank you again for the opportunity. As you know,  
22 biofuels have the potential to help New York  
23 reduce its dependence on oil, reduce its  
24 contribution to global warming and provide more  
25 affordable energy services. Pursued without

adequate guidelines, however, biofuels production carries grave risks to our lands, forests, water, wildlife, public health and climate. That's why NRDC strongly urges the Council to pursue a biofuels approach that is performance-based, technology neutral and that ensures biofuels are part of the solution rather than part of the problem. We ask you to follow the low carbon fuel standard approach being adopted in California and under consideration by a group of ten Northeast Mid-Atlantic states in any biofuels program that you adopt. Many questions have been raised about biofuels. In particular, NRDC is concerned about the impact biofuels have on greenhouse gas emissions and emissions related to changing land use patterns. Devoting an increased share of U.S. agricultural output to fuel production rather than food and livestock feed will result in increased demand for animal feed from sources abroad.

Indeed, there is growing evidence that soy farming leads directly and indirectly to the clearing of Brazilian rain forests. For example, every acre of tropical rain forest that is cleared to grow crops will increase about 655,000 pounds worth of



1  
2 CO2 over 30 years, or an average of nearly 22,000  
3 pounds per year, which would more than wipe out  
4 any greenhouse gas benefits that the biofuel might  
5 be processed from crops grown here in the U.S. We  
6 strive for policies that encourage renewable fuels  
7 from sources that do not create such impacts.

8 NRDC believes that the strongest approach is one  
9 that rewards the lowest carbon fuels and that  
10 inhibits the use of higher carbon fuels. Both the  
11 EPA and California are pursuing this approach.

12 The EPA is now implementing the Energy  
13 Independence and Security Act of 2007. This law's  
14 renewable fuel standard requires that at least 22  
15 billion gallons of the 36 billion total be  
16 advanced biofuels, which must be at least a 50%  
17 greenhouse gas reduction compared to conventional  
18 gasoline or diesel. The RFS also establishes  
19 clear parameters for sustainable sourcing of  
20 biofuels feedstocks that guard against the loss of  
21 native forest and prairie and protect threatened,  
22 imperiled and endangered species in public lands.  
23 We expect the EPA to release a report on the  
24 proposed rule, including a lifecycle greenhouse  
25 gas accounting protocol very shortly. The

1  
2 California Air Resources Board is also developing  
3 an accounting protocol as part of its low carbon  
4 fuel standard, the LCFS, on a similar schedule as  
5 the EPA. NRDC strongly believes that an LCFS is a  
6 better approach to encouraging innovation among  
7 fuels and reducing global warming pollution than  
8 an RFS or any broader biofuels program that lacks  
9 any greenhouse gas safeguards. Such a program  
10 doesn't prejudge the winners like a corn ethanol  
11 or a biodiesel program would. Instead, an LCFS is  
12 fuel neutral, technology neutral and allows all  
13 carbon fuels to compete in a marketplace that will  
14 reward lower carbon fuels. Furthermore, while the  
15 new federal RFS will provide a minimum lifecycle  
16 greenhouse gas performance level, the California  
17 LCFS encourages the best performance. Finally, an  
18 LCFS discourages high carbon fuels, such as liquid  
19 coal, oil shale and tar sands, unlike an RFS  
20 approach. Last December, New York joined ten  
21 other Northeast and Mid-Atlantic states in a  
22 letter of intent to jointly explore a regional  
23 LCFS, a move that NRDC strongly supports. Any  
24 action taken by the Council should advance the  
25 city towards the goals of the regional LCFS. Even

1  
2 a program covering just bioheat should be designed  
3 to ensure that any biodiesel that is used in  
4 bioheat meets the performance characteristics that  
5 would be adapted in a New York or Northeast LCFS.  
6 In addition, lowering sulfur levels to ultra low  
7 sulfur levels is also something that we would  
8 advocate for and require that oil fired boilers  
9 update their air pollution permits. So to sum up,  
10 NRDC's biofuels recommendations can come in three  
11 simple points. The first is that any biofuels or  
12 bioheat program should go into effect as soon as  
13 either California or the EPA promulgates its  
14 lifecycle greenhouse gas accounting protocol and  
15 incorporates such a protocol. Any program to  
16 require the use of biofuels in heating oil should  
17 provide a greenhouse gas benefit of at least 50%  
18 and ideally 60% or greater compared with the  
19 baseline fuel, thereby incorporating the  
20 performance goals of the federal RFS program.  
21 Third, any program should be fuel neutral and  
22 technology neutral so that all replacement fuels,  
23 not just biodiesel, have a chance to compete in  
24 New York City market so long as they meet your  
25 performance standards. Thank you again for the

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opportunity to testify.

CHAIRPERSON GENNARO: Thank you, Mr. Bull. We'll hear next from Ms. Schiavoni and then I'll have questions or comments for the panel. Ms. Schiavoni, thank you for being here. I have a copy of your testimony and please proceed.

CHRISTINA SCHIAVONI: Thank you very much for having me here. My name is Christina Schiavoni. I am the Co-director of the Global Movements Program at World Hunger Year, otherwise known as WHY, based here in New York City.

CHAIRPERSON GENNARO: This is World Hunger Year from Bill Ayers?

CHRISTINA SCHIAVONI: Yes, and the late Harry Chapin. We take a holistic approach to addressing issues of hunger, poverty, food system change and sustainability. While our work is both at the national and international level, we are based here in New York City and we take a great interest in New York City policies. We are very proud to have played a role and to be in partnership with many who are increasing the

1 leadership of New York City in the area of food  
2 system change in our farm to school programs, in  
3 our farmer's market programs, in partnerships with  
4 urban communities and rural communities in New  
5 York State. We just feel that regarding the issue  
6 of biofuels and biodiesel, there are very  
7 important questions and concerns that must be  
8 raised because we just want to make sure that New  
9 York City does not adopt a biofuel policy that  
10 could unintentionally undermine all of the other  
11 great work that New York City is striving to do in  
12 the area of food system change and building a  
13 stronger and more sustainable food system. My  
14 written statement that I passed out is the  
15 executive summary of the findings of a report  
16 called, "Fueling Disaster, A Community Food  
17 Security Perspective on Agrofuels." This is  
18 available on the World Hunger Year website,  
19 [whyhunger.org](http://whyhunger.org). This report was done by World  
20 Hunger Year and several other partners that are  
21 part of the Community Food Security Coalition. It  
22 was done to examine the impacts of industrial  
23 scale biofuels. We do make a distinction between  
24 more local and regional smaller scale biofuels and  
25

1  
2 larger scale industrial biofuels. This particular  
3 report was looking at large scale biofuels and the  
4 impacts on community food security. Quickly, for  
5 those who are not familiar with the term community  
6 food security, it refers to the right of all  
7 people in all communities to obtain safe,  
8 culturally acceptable, nutritionally adequate  
9 diets through a sustainable food system that  
10 maximizes community self-reliance and social  
11 justice. To do this we looked at four areas. We  
12 looked at food security and the right to food,  
13 workers' rights, community economic development  
14 and the environment. Obviously there's not much  
15 time to go into any of this, so I'll have to  
16 really summarize. But as related to food security  
17 and the right to food, we found that expansion of  
18 agrofuel production, including industrial scale  
19 production of so-called second generation  
20 agrofuels, will directly compete with community  
21 resources for food, such as land, water and  
22 nutrients. It will increase dependency on food  
23 imports and perpetuate an unregulated market for  
24 agricultural commodities that neither guarantees  
25 the right to food for all nor fair prices for

1 farmers. We also want to note that Ziegler, the  
2 former UN Special Rapporteur on the Right to Food  
3 at the UN called biofuels a crime against  
4 humanity. There are many others currently at the  
5 UN, including the current rapporteur for this  
6 right to food that are really examining biofuels  
7 for their social implications. We are all  
8 familiar as well with the increasing prices of  
9 food. I know that speakers had different  
10 viewpoints on this, but multiple studies have  
11 attributed biofuels to playing a role in the  
12 increase in prices of food. But the long and the  
13 short is that we have a failed agricultural  
14 system. We have failed commodity policies. We  
15 feel that industrial biofuels just feed into and  
16 support a very broken system. It's not the  
17 biofuels themselves, but it's the type of the  
18 system that we're looking at. When it comes to  
19 workers' rights, increased demand for agrofuel  
20 crops such as sugar cane and soy will definitely--

21 CHAIRPERSON GENNARO: [interposing]

22 If I could, just to put a little focus, when we  
23 reached out about the hearing about the scope of  
24 the hearing, I made the distinction. We had a  
25

1  
2 discussion on how to cast this hearing and whether  
3 we were going to delve into the global  
4 implications of all kinds of biofuel production  
5 and sugar cane-based ethanol. The focus of the  
6 hearing is really more on what we as a city would  
7 do in our sort of 200 million gallons of B100 and  
8 where we would get that instead of the global  
9 significance of that and the benefits that we  
10 would get in clean air versus any sustainability  
11 issues. So to the extent that we can stay within  
12 the focus of the hearing would be great.

13 CHRISTINA SCHIAVONI: Thank you. I  
14 do respect that. But I was asked to share the  
15 view coming from my organization and the  
16 constituencies that we represent. We see this as  
17 part of a global trend. That is actually what  
18 motivated us to write this report because policies  
19 similar to this that are being vetted and  
20 considered in communities and cities across the  
21 U.S. inherently impacts our broader biofuel  
22 policies. The reason that this report was done is  
23 that we feel that we cannot look at U.S. policy in  
24 isolation. We are setting trends that impact the  
25 rest of the world.



CHAIRPERSON GENNARO: Please  
continue.

CHRISTINA SCHIAVONI: Thank you.  
I'll try to do these last parts really quickly.  
On community economic development, agrofuels are  
often presented as a way of rescuing an industrial  
agriculture-based economy that is deeply broken.  
The reality is that the commodity markets  
themselves are broken. Without addressing  
corporate concentration, parity for family farmers  
and the need for local food systems to feed  
communities, simply selling more commodities for  
agrofuels will not reverse existing failures, nor  
will it bring lasting prosperity to rural  
communities in the U.S. or abroad. This includes  
our rural communities here. I also want to say  
it's actually not surprising that the petroleum  
industry has come up with studies in support of  
biofuels because companies such as BP, Shell and  
Chevron are invested in biofuels, as are Cargill,  
ADM and Bunge on the commodity side and Monsanto,  
DuPont and Syngenta on the life science GMO side.  
So we think it's really important to look at who  
is controlling these industries and who is

1  
2 benefiting from them. We also want to mention  
3 that while initially agrofuels were developed in a  
4 way that was more at the local level and more  
5 controlled by family farmers, increasingly  
6 refineries are being concentrated in the hands of  
7 agrobusiness and that's another concern. On  
8 environment, which is the last point in the  
9 report, agrofuels are promoted as a green  
10 technology, yet current production practices  
11 contribute to water depletion, soil erosion and  
12 contamination by genetically-modified organisms,  
13 which is an important issue as related to soy, and  
14 other environmental problems. The refining  
15 process is quite polluting and the common placing  
16 of refineries in low-income communities has raised  
17 serious environmental justice concerns.

18 Furthermore, and this has been mentioned, the net  
19 energy balance of agrofuels remains subject to  
20 major debate. And as carbon capturing forests and  
21 grasslands are felled to make way for fuel crops,  
22 the result will be increased rather than decreased  
23 greenhouse emissions. Lastly, I just want to say  
24 that the report did end with some recommendations.  
25 We just want to say that even proponents of

1  
2 biofuels who are coming from a very good place,  
3 they often talk about strict standards. But the  
4 fact is that aside from standards internally  
5 adopted by the industries themselves, broad  
6 universal standards do not currently exist to  
7 ensure that the problems mentioned in this report  
8 are addresses. The same with new technologies are  
9 often referred to but the fact is that these new  
10 technologies are not available on the scale that  
11 would be necessary as of yet. So we feel that to  
12 set a standard that cannot be reached through  
13 sustainable practices, through practices that  
14 ensure the human right to food and sustainability  
15 of the environment, we think that would be  
16 mistake. Furthermore, while I don't have time to  
17 get into all of the recommendations of the report,  
18 one thing that we think is very important to  
19 emphasize is that no alternative to fossil fuels  
20 will be able to meet current and future energy  
21 demands if we do not decrease our energy usage  
22 altogether and put a major emphasis on  
23 conservation. We think that this has to be in any  
24 conversation about fuel and about alternative  
25 fuels. Just to emphasize, there are promising

1  
2 biofuel practices such as the use of cooking oil  
3 that was mentioned earlier. We support that. We  
4 support truly sustainable biofuel practices. We  
5 think that the city could play a leadership role  
6 in helping to facilitate those type of practices.  
7 Thank you very much.

8 CHAIRPERSON GENNARO: Thank you.  
9 We appreciate you both being here. We have move  
10 on to other witnesses. I'm going to try to resist  
11 the temptation to go back and forth here. It was  
12 important that you be here and important that you  
13 put your views on the record. You've done that.  
14 You will continue to be a part of the process as  
15 we go forward with this effort. Give my best  
16 wishes to the good people at NRDC, Mr. Bull and  
17 World Hunger Year, Christina. Thank you for being  
18 here today.

19 CHRISTINA SCHIAVONI: Thank you  
20 very much.

21 PIERRE BULL: Thank you.

22 CHAIRPERSON GENNARO: The next  
23 panel, John Nettleton from Cornell, Richard Nelson  
24 from Kansas State University, and Dr. C. R.  
25 Krishna from Brookhaven National Laboratory. Give

1  
2 those to the sergeant. As I said, the next panel  
3 after the science panel will be a statement from  
4 the League of Conservation Voters, and testimony  
5 by Michael Seilback of the American Lung  
6 Association. Following that panel will be Judy  
7 Jarnefeld of NYSERDA, Paul Nazzaro of  
8 Massachusetts Oilheat Council and that will be  
9 followed by Michael Heimbinder of Habitat Map. We  
10 have Dr. Krishna, right?

11 DR. C. R. KRISHNA: Yes.

12 DR. RICHARD NELSON: Dr. Nelson.

13 CHAIRPERSON GENNARO: Dr. Nelson of  
14 Kansas State. Do we have John Nettleton from  
15 Cornell?

16 DR. C. R. KRISHNA: I'll give the  
17 apology for John Nettleton. He had to leave.

18 CHAIRPERSON GENNARO: He was here  
19 but he had to leave?

20 DR. C. R. KRISHNA: He has a class  
21 to give.

22 CHAIRPERSON GENNARO: I see. Why  
23 don't we proceed? The counsel will swear in the  
24 panel.

25 SAMARA SWANSTON: Gentleman, would

2 you raise your right hand? Do you swear or affirm  
3 to tell the truth, the whole truth and nothing but  
4 the truth today?

5 DR. C. R. KRISHNA: I do.

6 DR. RICHARD NELSON: I do.

7 CHAIRPERSON GENNARO: Thank you  
8 very much. I just want to make sure I have  
9 written statements. I have a statement from  
10 Richard Nelson. Dr. Krishna, do you have a  
11 written statement?

12 DR. C. R. KRISHNA: I didn't submit  
13 a written statement.

14 CHAIRPERSON GENNARO: Dr. Krishna,  
15 if you could proceed, we'd be very grateful to get  
16 your perspectives.

17 DR. C. R. KRISHNA: Thank you very  
18 much for inviting me to give testimony here. I do  
19 want to start off by saying that this is my  
20 personal opinion as a research scientist and it  
21 does not reflect Brookhaven National Lab or the  
22 Department of Energy. I've got to put that  
23 caveat.

24 CHAIRPERSON GENNARO: That's fine.  
25 These are your views and we appreciate that.

1  
2 DR. C. R. KRISHNA: Thank you. I  
3 want to talk a little bit about the emissions  
4 benefits from using biodiesel or a biofuel of that  
5 nature. We have been doing research on emissions  
6 from heating systems. I'm going to stick to  
7 heating systems. If you typically take heating  
8 oil and if you think of the sulfur in the heating  
9 oil, a pound of sulfur in the heating oil would  
10 produce would produce about three pounds of  
11 sulfuric acid, potentially. Not all of it may  
12 become sulfuric acid. Not all of it will  
13 necessarily fall in New York; some of it may go to  
14 New Jersey. Typically, as someone said before,  
15 the heating oil has about 2,000 parts per million  
16 of sulfur. Biodiesel meeting the ASTM standards  
17 typically has about 15 parts per million or less.  
18 It more or less meets the ultra low sulfur diesel  
19 quality. I had done some calculations to see that  
20 if you burn 100 gallons of a B20 blend, you can  
21 save about .9 pounds of sulfuric acid formation.  
22 If you transfer that to several hundred billions  
23 of ASTM No. 2 heating oil, it'll translate to  
24 several million pounds of sulfuric acid that we  
25 would be emitted to the air. So there's a

1  
2 significant benefit. The same benefit translates  
3 into PM 2.5 as well. We have made some  
4 measurements in heating systems, as opposed to  
5 diesel engines for example. The PM 2.5, that is  
6 the fine particulates, less than 2.5 milligrams.  
7 It's more or less a direct function of the amount  
8 of sulfur that we put in the fuel. It's more or  
9 less an effect of sulfuric acid. So you have a  
10 direct reduction of the PM 2.5 as you blend the  
11 biodiesel. So clearly that has environmental,  
12 health, lung, air breathing benefits. There is a  
13 very strong benefit because of the reduction of  
14 sulfur. In terms of nitrogen oxides, we also made  
15 measurements in nitrogen oxides in heating  
16 systems. Nitrogen oxides are a more complex. It  
17 needs chemistry that is much more complex too, but  
18 it's chemistry. The combustion system is also  
19 very complex so it's very hard to say what will  
20 happen. But unlike, for example, diesel engines  
21 where a lot of the reports suggest that nitrogen  
22 oxide when blending biodiesel might go up, in  
23 heating systems we have found that nitrogen oxides  
24 more or less stayed the same or there is a  
25 reduction. The reduction depends on the system.



1  
2 So if you want to see how much nitrogen oxide will  
3 reduce by using B20, with all the heating systems  
4 in New York City, you really would have to do  
5 field testing. You would have to look at the  
6 sample of equipment that's available and make some  
7 measurements and quantify that. So it's hard to  
8 quantify what the total amount of nitrogen oxide  
9 reductions would be. But typically we have seen  
10 reductions of about 5% to 10% in the heating  
11 systems. This is all blended with No. 2 heating  
12 oil. If you switch to residual oil, you clearly  
13 have the same kind of sulfur benefits. I believe  
14 in New York State the limit of sulfur is .3%,  
15 which is even higher than the amount of sulfur in  
16 heating oil.

17 CHAIRPERSON GENNARO: What is  
18 residual oil?

19 DR. C. R. KRISHNA: New York City  
20 limits residual oil to a .3% sulfur. Typical  
21 residual oil coming into New York City has about  
22 3,000 parts per million sulfur, as opposed to  
23 about 2,000 for heating oil. So you have even  
24 higher sulfur. So if you blend biodiesel with  
25 that or any kind of a biofuel you would have a

1  
2 higher benefit in terms of sulfur reduction. In  
3 terms of nitrogen oxide reductions, as I said  
4 before, the same complications arise. The range  
5 of heating equipment that burns No. 6 oil, which  
6 is large boilers, is not that large. So it may be  
7 easier to quantify if we can make measurements in  
8 the field. Typically what we have measured in the  
9 laboratory, which is a very small boiler and with  
10 residual oil and residual oil blends with  
11 biodiesel, we have seen reductions of 15% to 20%  
12 in nitrogen oxides. We have not seen any  
13 increase. It not exactly that it would stay the  
14 same, that it consistently goes down. In fact, it  
15 goes much more significantly as you increase the  
16 biodiesel blend percentage. But, again, I want to  
17 say that the difference of the piece of equipment  
18 and the kind of burner and the kind of combustion  
19 system and so on will play a role. But certainly  
20 there will be a reduction of nitrogen oxides and  
21 the corresponding benefits that you will obtain  
22 from that. I don't want to talk too much about  
23 sustainability and different kinds of sources of  
24 biofuels and whatnot. We did start with the  
25 biodiesel. I kind of look at the analogy with

1 ethanol. I don't want to compare it to ethanol.  
2  
3 But we are I guess blending 10% ethanol with our  
4 gasoline and the only way we could do that is  
5 because we started making it the easiest way we  
6 could using corn. That may or may not be  
7 sustainable but we started off with that. Now we  
8 are going to the second generation ethanol, we may  
9 go to cellulosic ethanol. I see the same trend  
10 with biodiesel. For example, even with our  
11 research now we are looking more and more at non-  
12 food-based biodiesel. You might see it in the  
13 newspapers and so on. We had three airline  
14 companies burn blends of jet fuel blended with a  
15 Jetropa developed product of residual diesel  
16 blended to jet fuel specifications. More and more  
17 countries around the world and more and more  
18 companies are beginning to look at Jetropa as a  
19 source for biofuel. In fact, Boeing and European  
20 BP have a large contract with Yale University to  
21 look at the sustainability of Jetropa and what we  
22 can do to grow it in the U.S. in the limited  
23 deserts. They will look at how sustainable it  
24 would be and what kind of biodiesel they can make  
25 out of it. They are looking at what kind of jet

1  
2 fuel they could make out of it. We are looking at  
3 what kind of biodiesel we could from Jetropa that  
4 can blend with residual oil. In fact, we are  
5 going to look at blending Jetropa oil with the  
6 No. 6 fuel so you don't even have to convert it to  
7 the biodiesel. So my impression is the way we are  
8 proceeding and the way that the rest of the world  
9 is proceeding is to go to the next generation of  
10 biodiesel, which would be potentially more  
11 sustainable I would think and definitely non-food  
12 sources.

13 CHAIRPERSON GENNARO: Thank you.

14 Does that conclude your statement, Dr. Krishna?

15 DR. C. R. KRISHNA: Yes,  
16 essentially.

17 CHAIRPERSON GENNARO: Thank you.

18 We appreciate your statement and you're being  
19 here. We'll have questions and comments once we  
20 hear from Mr. Nelson. It also reminds me that  
21 it's been a long time since I've been to  
22 Brookhaven National Lab.

23 DR. C. R. KRISHNA: You're welcome  
24 any time.

25 CHAIRPERSON GENNARO: It's probably

1  
2 been about 25 years since my last visit. I was a  
3 young man during my last visit. Dr. Nelson?

4 DR. RICHARD NELSON: Good  
5 afternoon, Chairman Gennaro and members of the  
6 Committee. I want to thank you for the  
7 opportunity to come before you today and to offer  
8 testimony concerning one important issue facing  
9 the biodiesel industry. My remarks today, at  
10 least indirectly, no pun intended, address what  
11 Mr. Strickland talked about earlier concerning  
12 land use issues. My name is Richard Nelson. I  
13 currently serve with the Center for Sustainable  
14 Energy at Kansas State University. I'm also the  
15 Principal of Enersol Resources, which is a private  
16 energy and environmental consulting firm. I've  
17 been associated with applied research and  
18 assessment of bioenergy feedstocks and land base  
19 utilization for over 19 years and have served as a  
20 consultant to the National Renewable Energy Lab,  
21 Oakridge National Lab, Idaho National Lab, the  
22 Western Governors Association and a variety of  
23 private entities, mostly focusing on bioenergy  
24 feedstock and environmental assessment, in  
25 particular, sustainable biomass production. My

1  
2 purpose before this committee today is to address  
3 some issues related to land use for biofuel  
4 production, specifically those related to  
5 biodiesel. First of all, I would like to state  
6 upfront that converting rain forest or pristine  
7 lands for production of agriculture commodity  
8 crops of any kind makes absolutely no sense  
9 whatsoever for many different perspectives which  
10 are too numerous to go into now. The same can  
11 certainly be said of removing land and feed grains  
12 and/or oil seeds from the market for biofuel  
13 production at the expense of feeding the world's  
14 population. Without question, preserving the  
15 natural resources and environmental and ecological  
16 services of our land is critical to the future of  
17 our society as we all know. There are two  
18 important points I wish to make here at the  
19 beginning of my presentation that have a direct  
20 bearing on the issue of land use changes, whether  
21 direct or indirect. First, in the public  
22 discussion of indirect land use, land, at least  
23 within the United States is, for the most part,  
24 perceived as basically homogenous. By all means  
25 it certainly is not. I live in Kansas. I've been

1 through that state many times and the land base  
2 has changed dramatically. Land bases differ by  
3 their individual chemical and physical  
4 characteristics as well as local climate,  
5 precipitation and sunlight, all of which affect  
6 how they are utilized and managed, which coupled  
7 together can make a world of difference in their  
8 sustained productivity. Within the larger  
9 discussion of biofuels development, including land  
10 use, I think it's time to get very, very real  
11 about what exactly we're talking about concerning  
12 land bases and what we're considering for biofuels  
13 and food and feed and fiber production to get a  
14 clearer picture about sustainable biodiesel  
15 development. This really has not been done on a  
16 refined regional and localized scale and is part  
17 of my consulting work currently with Oak Ridge  
18 National Laboratory. The second point I would  
19 like to make, which builds on the first one,  
20 involves how I believe the biodiesel industry, and  
21 in particular soybean-based biodiesel, is being  
22 unfairly painted as carrying a large burden of  
23 unsustainable global land management. No other  
24 industry has been held accountable by regulators  
25

1  
2 for actions that occur in the global economy  
3 beyond the control of its operators. So I ask the  
4 following question, to what extent should biofuels  
5 be burdened with some or all other factors  
6 concerning global land use change and global land  
7 use management? To start with, I believe it's  
8 vitally important to establish what actually  
9 constitutes a baseline condition regarding global  
10 feed, food and fiber supply that is without U.S.  
11 and/or global biofuel production and their effects  
12 on global land use management pro and con. This  
13 is an extremely important point that I believe in  
14 and one that absolutely must be addressed. To  
15 make a statement that soybean-based biodiesel is  
16 destroying the rain forests in Brazil I think is  
17 an irresponsible statement and one that is a one-  
18 to-one and in this global economy there are many  
19 factors that you just can't make that statement.  
20 For example, Michael Wang of Argonne National  
21 Laboratory pointed out in the Searchinger article  
22 it wasn't clear what baseline, if any, was used in  
23 the analysis. This type of data is absolutely  
24 critical as we discuss sustainable biofuel  
25 development. Understanding local agronomic,



1  
2 economic and political factors affecting land use  
3 decisions and the factors that lead to land  
4 degradation and land loss via unsustainable  
5 farming is absolutely crucial. As an example of  
6 this, a recent paper, which is listed at the  
7 bottom here, suggests ineffective and impoverished  
8 economies, failed political systems, lack of  
9 agricultural technology transferred to developing  
10 countries and ill-conceived agricultural and trade  
11 policies are the real culprits. This is  
12 definitely something we should consider. On the  
13 more technical side, due to my work on biofuel  
14 production and land base sustainability, four  
15 areas immediately come to mind that need to be  
16 both considered and deserve further analysis and  
17 research which can definitely impact the indirect  
18 land use issue. The first and foremost I think is  
19 yield improvements. Mr. Neal alluded to earlier  
20 about the increase in soybean yields. These are  
21 extremely important to sustainable biofuel  
22 feedstock production and have a direct impact on  
23 land use utilization. From 1990 to 2007, U.S.  
24 soybean yields increased 22.3% from 34 bushels to  
25 41 bushels per acre and are expected to increase

1  
2 as much as 10% within the next two years due to  
3 new seed varieties. Gaining productivity on the  
4 same acres or land base will only help increase  
5 the sustainability of oil and mean production from  
6 soybeans. I've been around the agricultural  
7 community quite a bit, and trust me, farmers would  
8 much rather farm a lot less acres and get  
9 increased productivity off the ones they're doing  
10 than try to farm a larger land base. New crops,  
11 at least new to the biofuel world, such as high-  
12 yielding oil seeds like Camelina, Brassica Juncea  
13 and others may provide sustainable sources of oils  
14 with less energy inputs, thereby increasing the  
15 energy profit ratio, which Shelby mentioned  
16 before, renewable energy output versus fossil fuel  
17 input, provide environmental enhancements such as  
18 improved soil till to the land bases upon which  
19 they are grown and potentially provide a greater  
20 return to the rural land owner. In addition, the  
21 hottest area in research right now in biofuels is  
22 with the production of oil from algae. This isn't  
23 quite at the large scale commercial stage as of  
24 today but does have tremendous potential to  
25 significantly increase the oil supply without

1  
2 impacting the land base. In certain geoclimatic  
3 areas of the United States, particularly in south  
4 east and south central and somewhat in east  
5 central Kansas, which I'm familiar with, it's  
6 possible to double-crop soybeans with a small gain  
7 crop such as winter wheat. Soybeans are no till  
8 planted immediately after the winter wheat  
9 harvest; hence you get two crops per year versus  
10 one. This makes utilization of the same acreage  
11 for two annual crops versus only one possible with  
12 much greater returns. In the case of soybeans  
13 directly behind winter wheat, they, as a legume,  
14 provide a replenishment of nitrogen to the soil  
15 which helps maintain and/or increase the soil  
16 quality and productivity. In this case no extra  
17 land would be required for biodiesel feedstock  
18 production. Lastly, it is a potential utilization  
19 of under utilized and marginal lands. One  
20 overlooked aspect associated with the increase in  
21 the biodiesel supply is the utilization of under  
22 utilized and marginal lands which are generally  
23 defined as not being able to support sustained  
24 commodity crop production due to a variety of  
25 reasons such as low rainfall, depleted soils and

1  
2 so on. They very well may be able to provide a  
3 sustainable for biodiesel feedstock production  
4 when paired with one or more of the new crops such  
5 as Camelina or Brassica Juncea, which have fewer  
6 nutritional needs and have a greater drought  
7 tolerance. Planting high yielding oil seeds on  
8 marginal acres will very likely provide for land  
9 base enhancement due to less erosion and  
10 subsequently less carbon loss with that erosion  
11 and water runoff as well as an improvement in soil  
12 tilth due to annual cover. I have provided the  
13 committee with three different pictures. I didn't  
14 print out a bunch on that. That's basically what  
15 marginal land looks like. We're not talking about  
16 pasture. We're not talking about prairie, which  
17 is pristine lands that we're going to till up and  
18 put in soybeans. It's land that hasn't been  
19 sustainably productive over a number of years.  
20 Given these attributes, biodiesel feedstock  
21 production on these lands would definitely be a  
22 good thing for air, water and soil quality. In  
23 Kansas, we currently have a dedicated effort to  
24 investigate these types of under utilized marginal  
25 acreages for many types of bioenergy feedstock

1  
2 production scenarios and see how they affect  
3 environmental quality both pro and con. To me  
4 this is an extremely important area we need to  
5 consider and begin to earnestly analyze  
6 nationally. The science of indirect land use  
7 change is certainly in its infancy and is highly  
8 uncertain at this point. Analysis of indirect  
9 greenhouse gas emissions with respect to biofuel  
10 development requires an intimate understanding of  
11 a myriad of global agricultural, economic and  
12 trade, commodity and demand, social and political  
13 issues and effects, all intertwined. Even among  
14 researchers who agree indirect land use change  
15 effects of biofuels should and can be analyzed,  
16 the disparity in the estimates of these effects is  
17 absolutely huge. A recent study by Purdue  
18 University researchers concluded, for example,  
19 land use emissions associated with expanded corn  
20 ethanol production under the RFS was nearly four  
21 and one half times lower than the estimates as  
22 reported by Timothy Searchinger. This to me  
23 proves far and wide differences do exist in how  
24 the issue of land use change is viewed and  
25 analyzed. Upon review, I have personally found

1  
2 the data and assumptions used by Purdue University  
3 researchers to be more realistic than those used  
4 by Searchinger et al. California is currently  
5 planning to include a factor for indirect land  
6 use, which even upon inclusion will likely still  
7 make biodiesel from soybeans about 40% better than  
8 petroleum in terms of greenhouse gas emissions.

9 Biofuels definitely need to be a part of the  
10 overall energy security solution I believe and  
11 certainly feel they should not be unnecessarily  
12 burdened with the whole of problems in global land  
13 management due to increased energy and  
14 environmental needs and concerns worldwide. I  
15 would also like to emphasize that in my opinion,  
16 reliance upon a single analysis or two by  
17 individuals, parties or organizations concerning  
18 how to account for indirect land use, such as the  
19 one advanced by Searchinger, is premature and  
20 really makes no sense given the many other  
21 analysis. The converse would also be true. If I  
22 came up with an article that said biofuels were  
23 the do all and end all, it should be debated  
24 strenuously in the public to ferret out the good  
25 and the bad and the pro and the con. The number

1  
2 and type of factors that drive land use expansion  
3 worldwide are numerous, extremely complex and as  
4 I've shown earlier, wide variations in land use  
5 emissions exist. So if I were to make one  
6 recommendation to policymakers today, it would be  
7 to rely on the current scientific consensus until  
8 such time as the new consensus is based on sound  
9 scientific research and possibly even a worldwide  
10 standard from the International Standards  
11 Organization, ISO, is developed. We realize as a  
12 scientific community we are still researching and  
13 investigation this issue. Again, thank you for  
14 the opportunity to address this committee. If  
15 time permits, I'd be pleased to answer any  
16 questions. Thank you.

17 CHAIRPERSON GENNARO: Thank you,  
18 Dr. Nelson and Dr. Krishna. I certainly  
19 appreciate your perspective. I know people in the  
20 room benefited by having the benefit of your  
21 views. Again, returning to my practical  
22 perspective here. I'm an elected official in a  
23 city where people have lots and lots of asthma  
24 incidents. I'm trying to figure out a way to burn  
25 200 million gallons less of No. 2, No. 4, and No.

1  
2 6. While the global significance of indirect land  
3 use and the other implications are of interest and  
4 I don't want to be a bad boy, certainly my number  
5 one focus is to figure out how we can burn 200  
6 million gallons less of No. 2, No. 4 and No. 6. I  
7 continue to believe that the amount of biodiesel  
8 feedstock that we would need to produce the 200  
9 million gallons that we would conceivably use here  
10 in New York City is an amount of biodiesel  
11 feedstock that is not globally significant.

12 What's your perspective on the global significance  
13 of the 200 million gallons worth of feedstock that  
14 we would conceivably use here in New York City?

15 DR. RICHARD NELSON: I think you're  
16 correct. It's kind of a drop in the bucket type  
17 of situation. I think you have to understand  
18 about the indirect land use that there are so many  
19 different factors that intertwine this. Again, to  
20 make a statement that you're going to attribute a  
21 gallon of biodiesel that's used in New York City  
22 to a rain forest in Brazil is just incorrect.  
23 Even if you wanted to go back and try to do that,  
24 you would waste so much natural and human  
25 resources trying to account for that because of



1  
2 all the different things that come into there. To  
3 burden that one gallon or anything with that, to  
4 me, is just scientifically incorrect. It's okay  
5 to take a look at that and try to do that, but  
6 again, I think it's scientifically incorrect. We  
7 can produce it, like Don Scott said, here in this  
8 country. We've got algae that'll be coming  
9 online, other new crops that will be coming on,  
10 other land bases that I think we can definitely  
11 improve the sustainability of. I know in my state  
12 of Kansas we can definitely take some of this  
13 marginal land and make it better. That's land  
14 that's not even used for food or fuel production  
15 as it is now.

16 CHAIRPERSON GENNARO: Thank you. I  
17 continue to believe that there's a way for us to  
18 go forward. In your recommendation for  
19 policymakers you indicated that we should do the  
20 best we can now and keep an eye on standards and  
21 try to advance that. I for one would support  
22 that. I just can't sort of wait that long for the  
23 perfect standard to be developed. When I look at  
24 my local perspective I have the full knowledge of  
25 knowing that there is nothing that we can do in

1  
2 New York City to really do anything that has any  
3 global significance. Certain we want to be a good  
4 city, but we do not have the ability with our 200  
5 million gallons of feedstock to be globally  
6 significant. But I think all jurisdictions can  
7 and should do whatever they can regarding  
8 sustainability and keeping an eye on standards and  
9 making that part and parcel of what we do here in  
10 New York City as we go forward. I certainly do  
11 appreciate the comment that you made in that  
12 regard. One other comment on the fourth paragraph  
13 of your statement you indicated that within the  
14 larger discussion of biofuel development including  
15 land use, it's time to get very real about exactly  
16 what land bases we are considering in order to get  
17 a clearer picture about sustainable biodiesel  
18 development. This has not really been done a  
19 refined regional or localized scale. I just want  
20 to get the proper meaning from that statement.  
21 Are you sort of chiding the industry for not doing  
22 more on that? What is precisely the meaning  
23 behind those two sentences?

24 DR. RICHARD NELSON: As the  
25 biofuels industry has developed with corn-based

1 ethanol or cellulosic ethanol or biodiesel from a  
2 number of feedstocks, there are certain areas of  
3 research that come out from that. These are  
4 things that come up and you need to start  
5 researching these now. I'm not chiding anybody  
6 for not doing it. It's just something that now we  
7 need to do this based on that this has come out.  
8 You do this and you solve a problem and that  
9 generally equates another question or something  
10 like that. It is being looked at. I'm looking at  
11 it.  
12

13 CHAIRPERSON GENNARO: Thank you.

14 Hopefully today will be an opportunity to start  
15 some colloquy between folks like yourself and the  
16 people in the Office of Long-Term Planning and  
17 Sustainability as we grapple with this. I greatly  
18 appreciate you being here today. Dr. Krishna, at  
19 the time, back in the early 80s, I worked for an  
20 entity called the Institute for Energy Research.  
21 I was a graduate student at SUNY Stony Brook. The  
22 Institute for Energy Research at the university  
23 was a US AID funded program by which we had mid  
24 and upper ranking folks from energy ministries  
25 around the world, from basically developing

1  
2 countries would come in. We had a collaboration  
3 with BNL and we used to go out there. So I was  
4 out there at the Brookhaven National Lab and that  
5 was a long time ago. It's high time that I go out  
6 there again and see what's going on. When I'm out  
7 there, I'll look you up.

8 DR. C. R. KRISHNA: You have an  
9 invitation. You can come and see what we do with  
10 biodiesel and biofuel.

11 CHAIRPERSON GENNARO: I'd be happy  
12 to do that. Thank you very much for being here  
13 today. We look forward to working with you as we  
14 go forward with our deliberations on this matter.  
15 Thank you.

16 DR. C. R. KRISHNA: Thank you.

17 DR. RICHARD NELSON: Thank you.

18 CHAIRPERSON GENNARO: The next  
19 panel is the League of Conservation Voters. Kelly  
20 Robinson I believe is going to represent the  
21 League. Michael Seilback, Vice President of the  
22 American Lung Association. To be followed by Judy  
23 Jarnefeld and Paul Nazzaro and then Michael  
24 Heimbinder. To be followed by Gene Pullo, John  
25 Maniscalco and John Hubra. Do I have two

1  
2 statements? I have the American Lung statement.  
3 I'll take the League statement also. You can  
4 swear in the panel.

5 SAMARA SWANSTON: Please raise your  
6 right hand. Do you swear or affirm to tell the  
7 truth, the whole truth and nothing but the truth  
8 today?

9 MICHAEL SEILBACK: Yes.

10 CHAIRPERSON GENNARO: Thank you  
11 both for being here. I appreciate your patience  
12 and for being a part of our discussion on this  
13 important topic. I recognize you, Mr. Seilback.  
14 Please state your name for the record and commence  
15 with your good testimony.

16 MICHAEL SEILBACK: Thank you. Good  
17 afternoon, Chairman Gennaro and members of the  
18 Committee. My name is Michael Seilback, Vice  
19 President of Public Policy and Communications for  
20 the American Lung Association in New York. Today  
21 you've heard and will continue to hear a lot about  
22 feedstocks, lifecycles and carbon footprints. I  
23 hope you'll indulge me as I veer a little off that  
24 course. As we sit here today, over one million  
25 New York City residents have been diagnosed with

1  
2 asthma, including 320,000 of which are children.

3 I want to speak very briefly about them and the  
4 struggles that many of them face daily to breath.

5 New Yorkers are exposed to some of the most  
6 unhealthy air pollution levels in the country.

7 Year after year the Lung Association State of the  
8 Air Report shows that outdoor air quality in the  
9 five boroughs is toxic. The State of the Air

10 Report is county by county report card on the two  
11 most pervasive air pollutants, particle pollution,

12 also known as soot, and the ozone, which is also  
13 known as smog. Long-term exposure to both of

14 these pollutants can permanently damage lung  
15 tissue and has been shown to shorten lives. In

16 order to significantly improve the air quality

17 right here in New York City, our association has  
18 long advocated for cleaning up home heating oil.

19 The combustion of sulfur-laden home heating oil  
20 contributes significantly to the high ambient

21 concentrations of ozone and fine particles found  
22 in New York State, particularly in New York City

23 and the surrounding counties. To that end, we're

24 strong advocates for the use of biodiesel in the  
25 home heating sector to address this significant

1 source of pollution. As an aside, we also support  
2 efforts to put caps on sulfur levels in heating  
3 fuel. Because it has such a high level of sulfur,  
4 combustion of home heating oil makes it the second  
5 largest source of sulfur dioxide emissions in the  
6 state, second only to the power sector. In New  
7 York City alone, almost one million households  
8 heat their homes each winter with heating oil.  
9 Over 79% of the state's consumption of heating oil  
10 occurs in New York City metropolitan area, which  
11 is an obvious contributor to our poor air quality.  
12 Yet, most New Yorkers aren't aware that this is a  
13 significant source of pollution in their homes and  
14 that there's alternative cleaner fuels out there  
15 for home heating purposes. Bioheat is one such  
16 alternative that New York City should and must  
17 work to promote as a cleaner, cost-efficient  
18 option. Unlike the use of biofuels in some other  
19 sectors, bioheat has been shown to reduce  
20 emissions of all pollutants. Promoting the use of  
21 bioheat, for example, a consistency of 20%  
22 biodiesel in combination with low or ultra low  
23 sulfur fuel will reduce the sulfur dioxide  
24 emission from heating oil by about 80% and  
25

1  
2 simultaneously will reduce NOx emissions by about  
3 20%. Not only will cleaner fuels result in  
4 decreased emissions of harmful pollutants, but use  
5 of cleaner biofuels can also produce economic  
6 advantages for the consumer. For example, at  
7 lower levels, boilers could be serviced less  
8 frequently and they've been shown to fail at least  
9 50% less frequently when using low levels of  
10 biodiesel. In fact, estimates have said that if  
11 this cleaner fuel was used statewide, homeowners  
12 could save \$200 million annually in cleaning  
13 costs. It's also important to recognize on the  
14 state level there's a residential bioheat tax  
15 credit. This credit provides an economic  
16 incentive which basically puts the cost level at  
17 the same for both bioheat and regular fuel. That  
18 tax credit is going to be in place for another  
19 three years. The time is now to clean up the air  
20 we breath. We implore you to consider the public  
21 health of New York City's residents when deciding  
22 the future of how we'll heat our homes. Intro.  
23 594 and 599 are two pieces of legislation which  
24 would help towards that goal. Thanks for the  
25 opportunity to comment and we're hear to entertain



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any questions you have.

CHAIRPERSON GENNARO: Thank you, Mr. Seilback. I greatly appreciate you being here. We'll have questions and comments once we hear the statement of League of Conservation Voters. We have Kelly Robinson with us today. Thank you, Ms. Robinson. We're happy to have the statement of the League.

KELLY ROBINSON: Thank you. On behalf of the New York League of Conservation Voters, I'm here today to pledge our support for legislation that would drastically clean up home heating oil. Specifically the legislation will require home heating oil consumers to switch to environmentally friendly bioheat as well as require all the fuel to have less sulfur in it. New York State is the largest consumer of home heating oil in the United States, with New York City alone consuming an estimated 500 million gallons of fuel oil a year. The burning of home heating oil contributes significantly to the environmental and health problems in New York. The consumption of home heating oil is responsible for releasing 42,000 tons of sulfur, a major lung

1  
2 irritant that has been shown to trigger asthma  
3 attacks, enter our atmosphere each year. Heating  
4 oil is also a significant contributor to  
5 greenhouse gas emissions and is a major component  
6 of the 79% of New York City's greenhouse gas  
7 emissions that come from buildings. Bioheat  
8 offers an affordable, sustainable and domestically  
9 produced alternative to domestic home heating oil.  
10 By blending biodiesel, a relatively clean fuel  
11 made primarily from agricultural products such as  
12 soybeans, with lower sulfur home heating oil, New  
13 York City can make a significant impact on the  
14 health of our communities. Bioheat containing  
15 anywhere up to 20% biodiesel, or B20, can be used  
16 in conventional heating systems and can reduce  
17 sulfur emissions by as much as 83% and carbon  
18 dioxide emissions by as much as 20%. The state  
19 legislator has recently restored the New York  
20 State residential bioheat tax credit which will  
21 provide financial assistance to homeowners who  
22 switch to bioheat. The time has come for the City  
23 Council to act on proposed legislation that would  
24 require all city buildings to begin using bioheat.  
25 It would eventually require all heating oil

1 distributed in the city to contain bioheat and  
2 would mandate that it contain a maximum level of  
3 500 parts per million sulfur and eventually be in  
4 par with on-road diesel fuel at 15 parts per  
5 million. This legislation will improve the health  
6 for countless New Yorkers and is a critical step  
7 forward in the city's pioneering fight to combat  
8 climate change. We urge the Council to continue  
9 its tradition of environmental leadership and act  
10 swiftly to approve this bold initiative to clean  
11 up home fuel.  
12

13 CHAIRPERSON GENNARO: Thank you  
14 both of putting forward a perspective that's  
15 greatly appreciated. Again, as I've state many  
16 times in this hearing, my goal is to figure out a  
17 way to burn heating oil. We've had an estimate of  
18 500 million gallons of heating oil we use a year.  
19 Our own paper that the Council put forward it was  
20 750 million gallons. I think we'll hear  
21 representatives of the industry to indicate that  
22 it's a billion gallons a year in heating oil. But  
23 it's some number. We have the ability to offset  
24 20% of that and get those clean air benefits and  
25 frankly I need your organizations to do what they

1  
2 do best in advocating this with my own  
3 institution, with the Speaker's office, with the  
4 Office of Long-Term Planning and Sustainability,  
5 with the Mayor, and this is something that is  
6 within our reach. We should get this done. We  
7 should do this as sustainably as we possibly can.  
8 We want to be good stewards of the planet of  
9 course. But there is a way to do it now. It's  
10 not going to happen absent your advocacy. To the  
11 extent that the Lung Association could actually  
12 develop hard numbers in terms of what the  
13 reduction of the burning of 200 million gallons of  
14 No. 2, No. 4 and No. 6 and the actual quantifiable  
15 clean air benefits that we will forgo if we don't  
16 do this. It's not my position to tell the  
17 American Lung Association what to say. But I  
18 think that's a very compelling message. A billion  
19 gallons a year offset 20% of that, that's 200  
20 million gallons. This is how much less of this,  
21 this, this and this, how many tons of this, this  
22 and this and what this means in reduced trips to  
23 the emergency rooms, increased pulmonary health.  
24 You folks know a lot of doctors. Doctors are  
25 friendly to your organization pretty much. Find

1  
2 them, get them out and I'm very grateful that  
3 you're here in support of what we're trying to do.  
4 Anything that you can bring to the table in terms  
5 of advocacy going forward to your members, to the  
6 members of this institution and to people in the  
7 administration, would be greatly appreciated. I  
8 thank you very much for being here. I look  
9 forward to partnering with you as we go forward.  
10 Please give my best to the good people at the Lung  
11 Association and Marcia and the good folks at the  
12 League of Conservation Voters.

13 KELLY ROBINSON: Thank you.

14 MICHAEL SEILBACK: Thank you.

15 CHAIRPERSON GENNARO: The next  
16 panel, as I indicated, is Judy Jarnefeld of  
17 NYSERDA and Paul Nazzaro of Massachusetts Oilheat  
18 Council. Thank you for being here. I appreciate  
19 it very much. The Counsel to the Committee will  
20 swear in the panel and then we can proceed.

21 SAMARA SWANSTON: Please raise your  
22 right hands. Do you swear or affirm to tell the  
23 truth, the whole truth and nothing but the truth  
24 today?

25 JUDY JARNEFELD: Yes.

PAUL NAZZARO: Yes.

CHAIRPERSON GENNARO: Thank you.

Ms. Jarnefeld, this is your testimony, right?

JUDY JARNEFELD: Yes.

CHAIRPERSON GENNARO: Please state your name for the record.

JUDY JARNEFELD: Thank you.

NYSERDA thanks you for this opportunity. NYSERDA is a public benefit corporation involved in a variety of energy and environment-related topics. We currently manage a range of bioenergy programs, including initiatives to develop, test and evaluate biofuels as potential alternatives to the fossil fuel based transportation and heating fuels New Yorkers now use. Environmentally sustainable biofuels can be produced locally, thus supporting energy independence, minimizing export of dollars for fuel, creating local economic development, raising farmer incomes and maintaining our agricultural base. However, many technical economic and environmental issues remain to be solved. Our research includes feedstock develop, production techniques and information collection. Our \$25 million program is supporting two

1  
2 cellululosic ethanol pilot facilities that will use  
3 a variety of biomass feedstocks, including willows  
4 grown right here in New York. We're researching  
5 emissions, lifecycle, greenhouse gas and land use  
6 implication of biofuels. Besides biofuels, we  
7 also invest in other technologies like solid  
8 biomass fuels and biogas and with appropriate  
9 standards in place for sustainability; these  
10 combined resources can play a major part in New  
11 York's future fuel mix. On the distribution side,  
12 we've helped upgrade terminals in retail gas  
13 stations and installed biofuel tanks and pumps.  
14 Public and private fleet demonstrations have  
15 proved biofuels work in our climate. In recent  
16 years, the greenness of biofuels has come under  
17 greater and more public scrutiny. Unlike wind to  
18 electricity, for example, which starts with one  
19 thing and ends with one thing, wind and then  
20 electricity, biomass starts with many different  
21 feedstocks, uses many different processes to  
22 convert, makes many different products that are  
23 used in many different end use applications and  
24 sold to many different kinds of customers. It's  
25 therefore important not to paint all pictures with

1  
2 the same broad brush. Our goal is provide a  
3 balanced scientific approach that is designed to  
4 be conscientious response to national and global  
5 concerns about the economic and environmental  
6 implications of biofuels and the fuel they  
7 replace. We closely follow organizations like  
8 NESCAUM, CARB and EPA and we're conducting our own  
9 studies as well. One report focused on lifecycle  
10 analysis of ethanol from corn and cellulosic  
11 feedstocks, biodiesel from soybeans and grease,  
12 biobutanol and renewable diesel. We've begun to  
13 develop NY-GREET, which is a New York specific  
14 version of the GREET model for evaluation of the  
15 total fuel cycle emissions and energy use for  
16 alternative fuel vehicles. We're expanding this  
17 model to include biofuel production pathways.  
18 We've heard New Yorkers use approximately 2.3  
19 billion gallons of heating oil each year  
20 statewide. NYSERDA and Brookhaven have taken the  
21 lead in biodiesel and home heating oil studies.  
22 Field demonstrations have been conducted and  
23 research is improving furnace equipment for  
24 biodiesel use. Research for all sizes of furnace  
25 equipment shows lower emissions, including NOx,



1  
2 and reduced maintenance costs for biodiesel  
3 compared to fossil fuels. Our field studies in  
4 off-road equipment and power generators show large  
5 decreases in fine particulate matter and NOx  
6 increases at B20 though some very high blends have  
7 the potential to increase NOx. In 2004, we found  
8 that B2 statewide for transportation and heating  
9 would use more than 70 million gallons per year of  
10 biodiesel by 2012 and New York could supply its  
11 own feedstock to make about 40 million gallons per  
12 year of that. 70% of our feedstock comes from  
13 greases, mostly from restaurants which are  
14 concentrated in major urban areas. That study  
15 also found that properly designed biodiesel  
16 production and use policies would attract  
17 investment, expand the state economy, generate  
18 additional income for New Yorkers, create new jobs  
19 and benefit farmers. Governor Paterson's  
20 renewable energy task force recommended in 2008  
21 that a renewable fuels roadmap and sustainable  
22 biomass feedstock study for New York, or the  
23 roadmap, be developed. Work has just started and  
24 the City Council is invited to participate. I've  
25 included a flier about an upcoming stakeholder

1 meeting in Westchester County on March 26th. The  
2 roadmap that we're doing addresses: lifecycle;  
3 environmental and public health consequences of  
4 renewable fuels compared to fossil fuels,  
5 including direct and indirect land use effects;  
6 outlines sustainability criteria and best  
7 management practices to mitigate potential  
8 negative impacts; analyzes New York State land  
9 use; resource condition and feedstock supply and  
10 local, state and regional economic effects;  
11 evaluates technological and economic barriers to  
12 large scale feedstock production in New York; and  
13 analyzes potential solutions; compares current and  
14 future renewable feedstock and process  
15 technologies to each other to current and future  
16 fossil fuels and to competing uses for biomass in  
17 terms of sustainability criteria, highest value  
18 uses and commercial viability in New York State.  
19 Now sustainability is a term that encompasses many  
20 things, including deforestation, carbon impacts  
21 and food versus fuel, but also jobs and economic  
22 development. Keeping farmers in business in New  
23 York State is probably a good thing. Public  
24 perception of sustainability will be assessed in  
25

1  
2 this study, including which criteria are most  
3 important, which can be enforced and which can  
4 even be measured. A draft of that roadmap will be  
5 done at the end of 2009. We're also collaborating  
6 regionally with the 11 Northeast and Mid-Atlantic  
7 states on the low carbon fuel standard letter of  
8 intent that you heard about earlier. Though our  
9 knowledge of biofuels is incomplete, there are  
10 some biofuels, feedstocks, processes and  
11 applications that appear to offer clear  
12 environmental benefits. Yellow grease-derived  
13 biodiesel in heating applications offers local and  
14 regional pollution reduction benefits and solves a  
15 waste management problem. No one biofuel can  
16 solve all of our problems, however, and there's  
17 not enough yellow grease to support a biodiesel  
18 industry. Even the new research aimed at using  
19 trap grease would likely only add a little bit  
20 more biodiesel. Yet doing nothing is a poor  
21 choice. Though feedstock specific standards are  
22 not perfect, they could be a good interim measure  
23 until better performance-based standards are  
24 developed. In conclusion, the sustainability of  
25 biofuels is clearly a complicated topic, but the

1  
2 energy and environmental challenges associated  
3 with our current fossil-based system are so  
4 significant that New York and the nation will need  
5 to consider a wide variety of opportunities to  
6 solve them. Biofuels are rapidly evolving and  
7 improving. So it would therefore be premature to  
8 categorically dismiss all biofuel pathways. Our  
9 challenge is to find what is most environmentally  
10 and economically sustainable for our region. In  
11 so doing, New York may have the opportunity to  
12 become a leader in an emerging clean energy  
13 economy. We welcome the opportunity to work with  
14 New York City in the development of science-based  
15 policies toward that end. Thank you.

16 CHAIRPERSON GENNARO: Thank you  
17 very much, Ms. Jarnefeld. We appreciate your  
18 comprehensive statement here. We'll hear from Mr.  
19 Nazzaro and then I'll have questions or comments.  
20 Mr. Nazzaro?

21 PAUL NAZZARO: Thank you. I'm here  
22 representing the National Biodiesel Board as their  
23 petroleum liaison, which I've served in that  
24 capacity for the past 11 years. In that capacity,  
25 my responsibility are to crisscross the country

1  
2 educating petroleum organizations throughout the  
3 entire supply chain, from the refiners to the  
4 distributors. The testimony I'm about to read is  
5 on behalf of Michael Ferrante, the president of  
6 the Massachusetts Oilheat Council, who was one of  
7 the early adopters when I presented to him the  
8 theory of moving biodiesel into oilheat and  
9 calling it bioheat. He's definitely someone that  
10 was way ahead of his time in embracing it because  
11 in our industry we hadn't had any real transition  
12 since we left coal and came to oil. His testimony  
13 has a lot of value in my estimation from the  
14 standpoint that he saw this seven years ago and  
15 has been working side by side with my  
16 organization, which is represent, the National  
17 Biodiesel Board. As president of the  
18 Massachusetts Oilheat Council, a state association  
19 of nearly 350 retail and wholesale heating oil  
20 companies, I am most pleased to submit testimony  
21 for your consideration as you weigh the possible  
22 introduction of biofuel blends within the home  
23 heating oil marketplace in New York City. I have  
24 been employed at the council for 18 years and I  
25 consider my work on biofuels and bioheat to be the

1  
2 most important project of my career. I truly  
3 believe it will help reshape the oil heat  
4 industry, offer consumers an innovative and clean  
5 burning fuel, reduce our overall use of fossil  
6 fuels and spark economic development in states  
7 that embrace biofuel use. On July 28, 2008, an  
8 act relative to clean energy biofuels was signed  
9 into law by Massachusetts Governor Deval Patrick,  
10 making Massachusetts the first state in the nation  
11 to mandate a blend of biofuel for home heating oil  
12 and transportation diesel beginning no later than  
13 July 1, 2010. At that time, all No. 2 petroleum  
14 distillate fuel must contain at least 2% blend of  
15 eligible petroleum distillate substitute fuel.  
16 The blend escalates to 3% by July 1, 2011, 4% by  
17 July 1, 2012 and 5% by July 1, 2013. It is  
18 important to note that the board of directors of  
19 the council, which is comprised of 40 retail and  
20 wholesale companies statewide, unanimously  
21 supported the biofuels legislation and our  
22 association played a key role in drafting the  
23 final measure. In addition, the National Oilheat  
24 Research Alliance, which represents the oilheat  
25 industry in 24 states, endorses the introduction

1 of biofuels for oil heating up to a 5% blend.  
2  
3 Prior to the passage of the Massachusetts biofuels  
4 law, Governor Patrick and our state legislator  
5 assembled an advanced biofuels task force. In  
6 their final report, the task force states that it  
7 was created out of respect for the magnitude of  
8 this task and because biofuels policy can be  
9 complicated and contentious. The task force held  
10 public hearings throughout the state to learn from  
11 academic institutions, communities, environmental  
12 groups and industry representatives. The hearings  
13 gathered input on biofuels research and  
14 development, production, commercialization,  
15 distribution and utilization. By holding these  
16 hearings, the task force tapped into expertise  
17 close to home and around the world, explored what  
18 other states and countries have implemented or are  
19 in the process of implementing and reviewed the  
20 most current scientific research. I encourage the  
21 New York City Council to establish a similar task  
22 force. I have included a copy of the final  
23 advanced biofuels task force report with my  
24 testimony for your review. I have also included a  
25 copy of the Massachusetts biofuels law and I'm

1  
2 hopeful that the measure will help guide you as  
3 you examine greenhouse gas emission standards as  
4 they relate to biofuels; the use of ASTM fuel  
5 standards, specifically ASTM 6751, to ensure the  
6 highest quality feedstocks for home heating oil  
7 equipment; options for possible implementation of  
8 BQ9000 certification for manufacturers of  
9 biofuels; low carbon fuel standards; legislative  
10 off ramps in the face of supply disruptions, lack  
11 of blending facilities or unreasonable costs; and  
12 averaging of heating oil sales to meet any mandate  
13 you may impose. In summary, Massachusetts has  
14 thoroughly examined all aspects of biofuel use for  
15 home heating oil and transportation diesel.

16 Although regulations to support the law still need  
17 to be drafted and approved, I am confident  
18 Massachusetts will help lead the nation in  
19 implementing a biofuels program that will advance  
20 energy policy on reducing fossil fuel use,  
21 jumpstart the use of cleaner energy fuels, provide  
22 benefits to oilheat consumers, improve environment  
23 and create jobs. I stand ready to assist the New  
24 York City Council with additional information or  
25 guidance. Thank you for the opportunity to



1  
2 provide testimony. Michael Ferrante, President,  
3 Massachusetts Oilheat Council as presented by Paul  
4 Nazzaro, National Biodiesel Board.

5 CHAIRPERSON GENNARO: Thank you,  
6 Mr. Nazzaro. Perhaps what you recommend here is  
7 about us doing some kind of task force. I know  
8 that today's hearing is not going to be the last  
9 word. We have to get these issues resolved, win  
10 the hearts and minds of folks and get people to  
11 understand the absolute imperative that as Ms.  
12 Jarnefeld stated in her testimony that doing  
13 nothing is a poor choice. So we have to do  
14 something. I am committed to reducing to the  
15 extent possible No. 2, No. 4 and No. 6 that we  
16 burn in New York City. And whether it's  
17 conferences or seminars or task forces or whatever  
18 we have to do to have the appropriate sharing of  
19 information to realize the imperative that we get  
20 this done and to deal appropriately with the  
21 issues that people raise. Whatever we have to do  
22 to get it done that we will do. I appreciate your  
23 coming forward on behalf of the State of  
24 Massachusetts and the National Biodiesel Board and  
25 making the case here. Ms. Jarnefeld, I want to

1  
2 thank NYSERDA for all that you're doing to build  
3 bridges and look for solutions an increase  
4 communications between stakeholders recognizing  
5 that we're a great agricultural state here in New  
6 York. We can be leaders in agriculture or leaders  
7 in energy under the leadership of Governor  
8 Paterson and you and the good people of NYSERDA  
9 are making that happen. Your testimony is greatly  
10 appreciated and will help to guide our actions  
11 going forward. I'd like to thank both of you for  
12 coming forth today. With that said, I have to  
13 call the next panel. Even though someone is due  
14 to take this room over at 1, I know we can stay  
15 here a little longer and we do have a fallback  
16 position on the 14th Floor. We're now going to  
17 hear from Michael Heimbinder of Habitat Map. And  
18 the next panel after that will be John Hubra, Gene  
19 Pullo and John Maniscalco. On that second panel,  
20 John Hubra will go first. He's got a time  
21 commitment and we have to make sure that we get  
22 him in. Michael Heimbinder I presume?

23 MICHAEL HEIMBINDER: Yes.

24 CHAIRPERSON GENNARO: Thank you  
25 very much for being here. If you have a written

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statement we'll take it.

MICHAEL HEIMBINDER: I don't have a written statement but I have a fact sheet I can give you. I apologize for not having one.

CHAIRPERSON GENNARO: That'll be fine. You'll be sworn in by the Counsel to the Committee, Samara Swanston and then you can proceed with your testimony.

SAMARA SWANSTON: Do you swear or affirm to tell the truth, the whole truth and nothing but the truth today?

MICHAEL HEIMBINDER: Yes, I do. My name is Michael Heimbinder. I'm executive director of Habitat Map. Habitat Map is a Brooklyn based environmental health justice nonprofit. I want to thank Councilman Gennaro and the Environmental Protection Committee for inviting testimony today regarding the sustainability of biofuels. Let me begin by simply stating there are good biofuels and there are bad biofuels. The difference between the two is primarily determined by what feedstock is used and how that feedstock is produced. For instance, by producing biodiesel from recycled restaurant

1  
2 grease collected in New York City restaurants,  
3 businesses like Tri-State Biodiesel lead the way  
4 in the production of environmentally friendly  
5 biofuels. Tri-State takes a local waste product  
6 that restaurants often pay to dispose of and  
7 transforms it into a valuable commodity that can  
8 fuel our vehicles and heat our homes.

9 Unfortunately, however, there just isn't enough  
10 good biodiesel to go around. Currently, Tri-State  
11 only produces around one million gallons of  
12 biodiesel annually. Though they may be capable of  
13 scaling up production, their capacity to produce  
14 good biodiesel is necessarily limited by the  
15 availability of local restaurant grease. Now take  
16 that million gallons of good biodiesel coming from  
17 Tri-State and subtract it from the 100 million  
18 gallons of biodiesel or perhaps 200 million  
19 gallons of biodiesel they city is projected to  
20 consumer if Councilman Gennaro's bioheat bill  
21 becomes a local law and we're left with a 99  
22 billion gallon deficit. We can argue about those  
23 numbers. There's a lot of numbers out there  
24 today. So where will the remainder of this  
25 biodiesel come from? Soybeans. And where will

1  
2 these soybeans come from? Industrialized  
3 Midwestern monoculture mega farms. In the U.S.,  
4 subsidies and tariffs make soybean oil the  
5 dominant feedstock for biodiesel production.  
6 Soybeans may be a renewable resource, but  
7 America's industrial scale farms devour and  
8 destroy enormous quantities of nonrenewable and  
9 irreplaceable resources. Powering the machines  
10 that plow, plant, harvest, cast fertilizer, spray  
11 pesticides, pump irrigation water, et cetera, is  
12 energy intensive. The fossil fuels consumed by  
13 on-farm operations release significant quantities  
14 of greenhouse gases and toxic air emissions.  
15 Adding to soybean agriculture's formidable fossil  
16 fuel tally, large amounts of natural gas are  
17 needed to produce the nitrogen-based fertilizers  
18 that promote their growth? These fertilizers  
19 break down in fields, releasing nitrous oxides, a  
20 global warming agent hundreds of times more potent  
21 than carbon dioxide. When these fertilizers leach  
22 from farm fields as they inevitably do, they  
23 poison drinking water and ravage marine  
24 ecosystems. Runoff from Midwestern farm fields  
25 ends up in the Gulf of Mexico where it contributes

1  
2 to a New Jersey size dead zone almost entirely  
3 absent of marine life. Making matters worse, 91%  
4 of the U.S. soybean acreage planted in 2007 was  
5 genetically engineered to tolerate herbicides, a  
6 development that has boosted glyphosate  
7 applications several-fold. Glyphosate, a powerful  
8 weed killer, is the third most common cause of  
9 pesticide illness in farm workers. Exposure has  
10 been linked to rare cancers, miscarriages and  
11 premature births. Less than 1% of all the crop  
12 land cultivated in the United States is certified  
13 organic by the U.S. Department of Agriculture.  
14 That means that at least 99% of the feedstock used  
15 to produce biofuels is coming from conventional  
16 agro industrial farms that are anything but  
17 environmentally friendly. This factor raises the  
18 fundament question of how can biofuels be  
19 environmentally friendly when they are produced  
20 from crops that were cultivated using  
21 environmentally destructive practices. When we go  
22 to the grocery and we choose organic over  
23 conventional, we do it because it's a green  
24 choice, it's a sustainable choice. Why don't we  
25 have this option when it comes t biodiesel? It

1  
2 would be irresponsible to move forward with any  
3 legislation supportive of biofuels before there is  
4 a certification system in place that can ensure  
5 biofuel sourcing and production practices are  
6 environmentally friendly. Rather than require  
7 biodiesel heating oil, the City Council should  
8 authorize an ultra low sulfur diesel heating oil  
9 mandate. Ultra low sulfur diesel will improve air  
10 quality in the city dramatically and reduce  
11 heating oil consumption without raising the cost  
12 of home heating or require government subsidies.  
13 Because the sulfur content of fuels is directly  
14 related to emissions of fine particulate matter,  
15 heating oil ranks as the largest source of fine  
16 particulate matter in the city. Able to penetrate  
17 into the deepest portions of the lungs, fine  
18 particulate matter contributes to premature death  
19 from heart and lung disease, cardiac arrhythmias,  
20 heart attacks, asthma attacks and bronchitis. By  
21 mandating ultra low sulfur diesel we can remove  
22 sulfur from our heating oil, thereby reducing fine  
23 particulate matter emissions by more than two-  
24 thirds. In addition, ultra low sulfur diesel  
25 improves furnace efficiency, decreasing fuel

1  
2 consumption and reducing maintenance. In 2006,  
3 the EPA mandated that all on-road vehicles are  
4 required to fill up with ultra low sulfur diesel.  
5 Why should our homes be an exception? I'd like to  
6 note that the improved air quality claims that  
7 biodiesel proponents are claiming, are often based  
8 on a false comparison. They're comparing  
9 biodiesel to No. 2, No. 4 or No. 6 heating oil.  
10 As I've said, we should move forward with the  
11 ultra low sulfur diesel heating oil mandate. We  
12 can get all of the air quality benefits without  
13 having to deal with this contentious issue of how  
14 sustainable biofuels are, especially when we don't  
15 have a certification system in place to certify  
16 that they're low carbon and environmentally  
17 friendly. This is clearly illustrated in a graph  
18 on page 124 of PlaNYC where they compare  
19 particulate matter reductions using different  
20 fuels. They specifically look at ultra low sulfur  
21 diesel and B20. In addition, there is a report  
22 put out by Synapse Energy Economics called  
23 "Quantifying and Controlling Fine Particulate  
24 Matter in New York City" where you were discussing  
25 with the New York League of Conservation Voters



1  
2 and the American Lung Association about getting  
3 good solid data about air emissions from these  
4 different fuel sources. This work has already  
5 been done by Synapse Energy Economics through this  
6 report that was sponsored by the Natural Resources  
7 Defense Council. Thank you for your time.

8 CHAIRPERSON GENNARO: Thank you. I  
9 certainly couldn't agree more with you about doing  
10 everything we can to move to an ultra low sulfur  
11 heating oil. I mean it's something that is in my  
12 bill, as you may know. To the extent that New  
13 York City can have the ability to sort of get us  
14 to that day we have that ultra low, whether or not  
15 New York City independently will be able to do  
16 that or whether that will have to be a regional  
17 initiative is something that I think we have  
18 people who are going to testify to that. But  
19 there is no greater supporter of getting sulfur  
20 out of heating oil than I. On the issues that  
21 relate to biofuels, this is why we have these  
22 hearings and hopefully through some of the  
23 testimony that's been put forward today you will  
24 be more sensitive to some of the issues that are  
25 put forward by the proponents of biofuels and

1  
2 their sustainability. Hopefully they will be more  
3 sensitized to some of the issues that you bring  
4 forward. You've done us a service by being here  
5 today and I greatly appreciate your testimony.  
6 Thank you very much.

7 MICHAEL HEIMBINDER: Thank you.

8 CHAIRPERSON GENNARO: We'll have  
9 the next panel of John Hubra, Gene Pullo, John  
10 Maniscalco. As I indicated, we'll have John Hubra  
11 testify first as I know he has a time commitment.

12 SAMARA SWANSTON: Gentleman, would  
13 you please raise your right hands? Do you swear  
14 or affirm to tell the truth, the whole truth and  
15 nothing but the truth today?

16 JOHN HUBRA: Yes.

17 GENE V. PULLO: Yes.

18 JOHN MANISCALCO: Yes.

19 CHAIRPERSON GENNARO: Thank you.  
20 If you have written statements, we'd be happy to  
21 have those. The National Oilheat Research would  
22 be Mr. Hubra, right?

23 JOHN HUBRA: Yes, sir.

24 CHAIRPERSON GENNARO: If you could  
25 state your name and commence with your testimony,

1  
2 we'd appreciate it.

3 JOHN HUBRA: Thank you, Councilman.  
4 I'm John Hubra and I'm here on behalf of the  
5 National Oilheat Research Alliance. I'm happy to  
6 be able to provide you and the committee with some  
7 information on bioheat and the future of the  
8 heating oil industry. The oil heating industry  
9 has a long history of working to improve its  
10 environmental record. Over the years the industry  
11 has adopted modern technology to improve the  
12 efficiency and emissions from oil heating  
13 equipment. Such improvements are a key component  
14 of sustainability. Recently the industry has  
15 decided to support the efforts of the Mid-  
16 Atlantic/Northeast Visibility Union's efforts to  
17 reduce sulfur in heating oil to 15 PPM. We  
18 believe that this will significantly reduce the  
19 particulate emissions from heating oil combustion  
20 and will lead to the next generation of ultra  
21 efficient equipment. As part of this effort to  
22 improve the environmental record and develop a  
23 better future for the industry and its customers,  
24 the oil heating industry began to look into  
25 biodiesel as a blend stock for heating oil. Early

1  
2 on we found that the addition of biodiesel to  
3 heating oil improved its emissions of sulfur  
4 dioxide, nitrous oxides and particulate matter.  
5 Additionally, we saw it as a beneficial if we  
6 could increase the domestic content of the fuel  
7 and simultaneously reduce emissions of carbon  
8 dioxide. We believe that this strategy, coupled  
9 with the industry's integration of solar  
10 technology will allow us to continue to be a very  
11 environmentally friendly fuel and pave the way for  
12 a continued role in America's energy future. I  
13 would not that this strategy is also in place in  
14 Germany. As the first phase of this strategy, we  
15 worked to ensure that bioheat, a mixture of  
16 biodiesel and heating oil, could be used in  
17 existing heating oil equipment. Essentially this  
18 would allow our existing customers to move to a  
19 greener fuel with no investment in technology.  
20 After significant effort, we were able to  
21 establish a standard for heating oil that provides  
22 for 5% of biodiesel to be mixed with heating oil.  
23 This standard followed the research conducted by  
24 Underwriters Laboratory. This allows us to begin  
25 selling this fuel to many of our customers. We

1  
2 believe this turn to a greener fuel will benefit  
3 them and our society. This hearing is examining  
4 many areas regarding the efficiency and lifecycle  
5 of bioheat. The issues are very complicated and  
6 attempting to understand the primary, secondary  
7 and tertiary impacts of our activities are  
8 important and will provide guidance to our future.  
9 As that information develops we should certainly  
10 incorporate it into policies that are developed.  
11 However, at the same time we examine these  
12 implications, people in the industry are moving  
13 forward. Additionally, we are seeing continuous  
14 advances in the technology and efficiency of  
15 biodiesel production and the crops that are used  
16 in it. I am confident that over time the record  
17 and the issues that you examine will show a much  
18 more positive view of bioheat than even we are  
19 seeing today. Thank you very much.

20 CHAIRPERSON GENNARO: Thank you,  
21 Mr. Hubra. I appreciate you being here. I'm glad  
22 we were able to get in your statement before you  
23 have to go to your next commitment. We greatly  
24 appreciate you being here. If it's possible for  
25 you to stay to hear the testimony of the rest of

1  
2 the panel, so be it. But if you have to leave we  
3 certainly understand that.

4 JOHN HUBRA: Certainly. Thank you,  
5 sir.

6 CHAIRPERSON GENNARO: Costa will  
7 hold off the people. He's my muscle.

8 GENE V. PULLO: Chairman Gennaro  
9 and members of the Environmental Protection  
10 Committee, I'm Gene Pullo, President of Metro  
11 Terminals and Metro Biofuels. Metro is a 66-year-  
12 old family owned energy service provider  
13 specializing in heating fuel, diesel fuel and most  
14 recently biodiesel. Metro is currently the  
15 largest marketer of biodiesel and bioheat in New  
16 York metropolitan area. We are in the process of  
17 building the region's largest biodiesel processing  
18 facility adjacent to our terminal in Newtown Creek  
19 in Greenpoint, Brooklyn. Our facility will be  
20 equipped to handle numerous biodiesel feedstocks  
21 including soy, recycled restaurant grease, and  
22 algae just to name a few. Our facility will  
23 directly create 30 green collar jobs and 50  
24 construction jobs right here in New York City.  
25 While other companies are fleeing the

1  
2 manufacturing business in Brooklyn, we are  
3 expanding ours. We see the biodiesel industry in  
4 New York City and New York State as a vital tool  
5 for economic growth during a time when we need it  
6 the most. I would first like to thank Chairman  
7 Gennaro for his leadership in promoting the use of  
8 cleaner and more responsible biofuels in New York  
9 City. I have traveled to biofuel conferences  
10 around the country and Jim is regarded as somewhat  
11 of a legend and a visionary. In my travels, I am  
12 inspired by the success of biodiesel mandates and  
13 initiatives in other cities and states, such as  
14 San Francisco, Minnesota, Massachusetts,  
15 Pennsylvania and Florida. But when I arrive back  
16 in New York I am frustrated. I'm frustrated  
17 because my family and I believe that in this  
18 country we need to improve air quality, fight  
19 global warming and reduce our dependency on  
20 foreign oil. For someone who makes his living in  
21 the petroleum business, these could be hard  
22 concepts to digest, let alone preach. But my firm  
23 believe is that the status quo is unacceptable.  
24 And in a small way I feel we have the power to  
25 change it. The question is why is New York City's

1  
2 bioheat mandate legislation stalled? Has air  
3 quality improved dramatically? Has global warming  
4 subsided? Has our dependency on foreign petroleum  
5 suddenly ceased? I think we all know the answers  
6 to these questions, but it bears repeating why  
7 there has been a global movement for biofuels and  
8 biodiesel in the first place. Biodiesel has no  
9 sulfur. That means that none of the soot or  
10 particulate matter that has been linked to asthma,  
11 cardiovascular disease and respiratory disease.  
12 It's simple. Biodiesel blends of B20 reduce  
13 overall sulfur content and particulate matter  
14 emissions by 20%. That in itself would compel air  
15 quality advocates and every environmental justice  
16 advocate to fight with everything they have to  
17 mandate a fuel with 20% less sulfur that's  
18 available, that's affordable, that requires no  
19 expensive change to oil refineries and that  
20 requires no special equipment. If that wasn't  
21 reason enough, replacing diesel in home heating  
22 oil with biodiesel blends will substantially lower  
23 our city's carbon footprint. B100 reduces carbon  
24 dioxide by 78%. Biodiesel reduces our dependency  
25 on foreign oil. It's made from diverse and



1  
2 plentiful domestic products which include  
3 agricultural crops such as soy, as well as  
4 recycled restaurant grease, animal fats and next  
5 generation feedstocks like algae. Biodiesel has  
6 been proved in federal studies to have a positive  
7 energy balance of 4.5, meaning the amount of  
8 carbon it takes to make biodiesel is far, far  
9 outweighed by the amount of carbon that it  
10 displaces by using that biodiesel, instead of 100%  
11 petroleum products like home heating oil and  
12 diesel fuel. In fighting for biodiesel in New  
13 York State I have found many allies in the  
14 environmental and health advocacy communities like  
15 the American Lung Association and like the League  
16 of Conservative Voters. Numerous other groups  
17 join Metro and New York Oil Heating Association in  
18 our fight to restore the bioheat tax credit in  
19 Albany. Since this is an oversight hearing on the  
20 sustainability of biofuels, I would like to  
21 address this issue as someone who has dedicated  
22 his life to learning about and promoting biodiesel  
23 precisely because of its sustainability. Our  
24 dependence on petroleum is not sustainable. It is  
25 not sustainable to keep importing oil.

CHAIRPERSON GENNARO:

[interposing]. Gene, I thought I wasn't going to have to do this, but my colleague Al Vann has a hearing that's scheduled to meet in this room. It's been brought to my attention that not only am I delaying him and his good work, but he's got people down in the lobby of 250 Broadway. They can't even come up to this floor until we vacate the room. On the 14th Floor, two floors below, we have a hearing room that's ready. I would ask the sergeant to take the tape that we're using and bring it downstairs. I beg the forgiveness of Al Vann. So we'll convene on the 14th Floor in one minute. We'll start on the 14th Floor in one minute. My apologies, but Al has business to do here.

[Pause]

CHAIRPERSON GENNARO: We're just about to start up again with Gene Pullo. I will note for the record that we still have the Office of Long-Term Planning and Sustainability in the room. We have Kizzy Charles-Guzman. Carter had indicated that he could give me until 1 p.m. and he went way beyond that. We're very grateful for

1  
2 him staying beyond the time that he had allotted  
3 for this hearing. Terrific, he's in for the long  
4 haul, which is great. Kizzy, sit down and relax.  
5 We should note that we have this room until 10  
6 o'clock tomorrow morning so we're all squared  
7 away. Why don't we pick up where we left off?  
8 Gene, I greatly apologize for having to skirt you  
9 out of that other venue we were at to this. With  
10 my apologies, if you could start up with your  
11 testimony where you had left off.

12 GENE V. PULLO: Our dependency on  
13 petroleum is not sustainable. It is not  
14 sustainable to keep importing oil from foreign  
15 governments in the Middle East and Latin America  
16 that seek to do our country harm. It is not  
17 sustainable to burn fossil fuels when a much  
18 cleaner, affordable, domestically produced  
19 alternative that contains significantly less  
20 fossil fuels is available in New York and New  
21 Yorkers can breathe easier. It is not sustainable  
22 to talk about global warming but ignore one of the  
23 most significant ways to fight it right here in  
24 our backyard. If by unsustainable we mean we  
25 can't continue doing what we've been doing because

1  
2 it'll dig us further into the hole we are already  
3 in, then delaying a bioheat mandate is the  
4 definition of unsustainable. The fact is,  
5 sustainability has only become the latest tool to  
6 thwart progress towards a greener, more politically  
7 stable country and a cleaner New York City. Few  
8 people can even articulate what sustainability  
9 means, how to achieve it or how to achieve a  
10 standard that is viable or provide any better  
11 alternatives. There are always those who resist  
12 change because it costs too much or because it's  
13 too complicated. Miraculously, biodiesel does not  
14 have to cost too much and it's pretty  
15 uncomplicated. But for some, if we don't have the  
16 perfect fuel, they'd rather stay with the status  
17 quo. Well as the saying goes, the perfect is the  
18 enemy of the good. There is no perfect fuel.  
19 Every renewable or alternative fuel has its  
20 unanswered questions. But our job should not be  
21 to wait indefinitely for those answers. We all  
22 want the perfect fuel, but sometimes we need to  
23 work with what's right in front of our own eyes  
24 and then work to make it better. That is exactly  
25 what's happening with biodiesel right now. We

1  
2 know that there are good and sustainable  
3 feedstocks available today. We also know that  
4 even better feedstocks are just a few years out,  
5 like algae and Jetropha. If the country doesn't  
6 embrace bioheat and biodiesel now, it runs the  
7 risk of losing the kind of green industry that  
8 most states are struggling to attract. It is  
9 essential that the New York City Council enact a  
10 bioheat mandate that we can all live with. Mayor  
11 Bloomberg has already pledged his support for  
12 biodiesel and bioheat by converting many city  
13 fleets and city buildings to biodiesel and  
14 bioheat. Now we are asking the Mayor, the Speaker  
15 and other city leaders to get behind defensible  
16 bioheat mandate that will make an even greater  
17 impact on the quality of life of all New Yorkers.  
18 Thank you.

19 CHAIRPERSON GENNARO: Thank you,  
20 Gene. In the transition from Room A to Room B, I  
21 want to find out what I did with my phone. I had  
22 it just a moment ago. Thank you, Gene. Carter  
23 wasn't here to hear this earlier but I had noted  
24 for the record that I was so grateful that you had  
25 stayed beyond your 12:30 to 1 p.m. commitment that

1  
2 you had given me. You're still here and I greatly  
3 appreciate that. I just wanted to recognize that  
4 and state that for the record. John, please  
5 commence with your testimony.

6 JOHN MANISCALCO: Good afternoon,  
7 Mr. Chairman. My name is John Maniscalco and I am  
8 the Executive Vice President of the New York Oil  
9 Heating Association, a traded association  
10 comprised of mostly family owned home heating oil  
11 distributors and terminal operators located  
12 throughout the City of New York. I thank you for  
13 this opportunity to testify today. As you know  
14 from past hearings, the New York Oil Heating  
15 Association fully supports the increased use of  
16 bioheat in New York City and has testified in  
17 favor of Intro. 594 as it pertains to a phased in  
18 bioheat mandate. It is time we made this happen.  
19 We have more than enough information to move  
20 forward with a sensible strategy to make our  
21 heating oil more renewable, cleaner, greener, and  
22 more sustainable for our city. As an industry we  
23 still have logistical concerns about bioheat. In  
24 particular, concerns addressing immediate supply  
25 outlets, product quality control and adequate ramp

1  
2 up time for terminals to retrofit the storage of  
3 bioheat into their terminals. However, we have  
4 placed aside our hesitations and we stand with  
5 environmental organizations and health advocacy  
6 groups like the American Lung Association to  
7 support a bioheat mandate because it is the right  
8 thing to do for our city, for our industry and for  
9 our country. It is the first toward a cleaner and  
10 greener future. Mandating a B5 bioheat blend  
11 could displace as much as 40 million gallons of  
12 distillate No. 2 oil every year. As we ramp up to  
13 B20 bioheat blend, the displacement of No. 2 oil  
14 could be as much as 160 million gallons. These  
15 are incredible numbers. Bioheat will enable our  
16 city to upgrade to a cleaner, more renewable fuel  
17 with impressive air quality benefits without  
18 requiring major equipment upgrades for our  
19 customers. The industry supports bioheat.  
20 Environmental groups and health advocates support  
21 bioheat. Mayor Bloomberg has already switched  
22 many city truck fleets to biodiesel and city  
23 buildings to bioheat. There is no greater bioheat  
24 advocate than Chairman Jim Gennaro, but we're  
25 still waiting two years later for a bioheat

1  
2 mandate to pass. It all seems to hinge on the  
3 issue of sustainability, which is the topic of  
4 today's hearing. There are people here today that  
5 are much more qualified than I to speak to this  
6 very complicated issue. We've heard or we are yet  
7 to hear from many of them. I am here to say that  
8 there will always be more questions raised than  
9 answered. Sometimes it's wiser to wait for  
10 further studies or a better political or  
11 economical climate to emerge before pursuing a  
12 major initiative. This is not the case with  
13 bioheat. To indefinitely delay an initiative with  
14 such clear benefits like reducing our dependence  
15 on foreign oil, improving air quality and fighting  
16 global warming because we're waiting for a low  
17 carbon fuel standard or because questions have  
18 been raised at indirect land use change simply  
19 makes no sense to me. More than one million city  
20 housing units use heating oil to heat their living  
21 space and millions more gallons of heating oil are  
22 used in the commercial and industrial sectors.  
23 Heating oil is here to stay, so why not make it  
24 better? That is what bioheat does. It makes a  
25 good product better for New Yorkers. And with a



1  
2 mandate will be done across the board on a level  
3 playing field. We need to move forward with the  
4 good information we have now and adjust  
5 accordingly as new issues emerge. New York City  
6 should be leading the way. Right now, we appear  
7 to be lagging behind. I thank you again for the  
8 opportunity to testify. I'd be happy to answer  
9 any questions.

10 CHAIRPERSON GENNARO: Thank you  
11 both for being here and all the good work you've  
12 done over the last couple of years to try to move  
13 this forward. We have Governor Paterson's bioheat  
14 tax credit, which presumably is not going to be  
15 here forever. As I see things, my vision, and let  
16 me know if you think this makes sense based on  
17 what you folks do because you have a better  
18 insight into this. The reason why I'm pushing  
19 strongly to get this done now is that we get the  
20 mandate going and we go to B5 or whatever, we see  
21 the bioheat industry blossom. That's going to  
22 help with the cost of bioheat as a fuel because it  
23 won't be a boutique fuel. My vision is to try to  
24 get this done now so by the time we lose the tax  
25 credit that the governor has put forward to help

1  
2 us bioheat as a fuel will be more cost  
3 competitive. It will be a more commercially  
4 available fuel and the economics of it work  
5 better. That way we can make that transition from  
6 what the governor is trying to do now to sort of  
7 help people along with bioheat to the point where  
8 this industry and this fuel can succeed in an  
9 economically sustainable way and not drive up the  
10 prices that people have to pay to heat their  
11 homes. I feel if we miss this opportunity and  
12 don't do this now the whole concept of the  
13 governor's tax credit will be for naught. And  
14 then by the time we lose the tax credit we  
15 wouldn't even be having this discussion now about  
16 trying to get bioheat going in New York City  
17 because we'd just be priced out. No one is going  
18 to want to pay more. That will be bad if we miss  
19 this opportunity. That's how I see things. Is  
20 that how you see it? Does what I'm saying make  
21 sense? Do you think that if we were to do this  
22 now, to what extent would prices of bioheat as a  
23 fuel actually go down because of the increased  
24 demand with the mandate? You know what I'm trying  
25 to say. How's my logic on this?

1  
2 GENE V. PULLO: Your logic is very  
3 correct. Interestingly, this current heating  
4 season 2008-2009, Metro has offered our customers  
5 that use B20, they actually get a net 10 cents  
6 savings for using B20. It costs them 10 cents  
7 more from us, but they get 20 cents back from New  
8 York State. So the consumer is saving 10 cents a  
9 gallon. This is on No. 2 home heating oil for  
10 residential use. So the economics are there. The  
11 economics were there 18 months ago. Then when the  
12 commodity prices all shot up, petroleum prices and  
13 commodity prices for soy oil and others went up.  
14 The cost even went up on restaurant grease.  
15 Biofuels started to rise also. Interestingly,  
16 biofuels have started to level off now. As I  
17 said, we being one of the largest suppliers of  
18 this product right now because we embraced it, we  
19 were able to save the consumer 10 cents a gallon  
20 net. They get it back when they file their New  
21 York State tax return. As long as they file a New  
22 York State tax return. The way it works is that  
23 any individual that files a New York State tax  
24 return that uses B20 gets up to 20 cents a gallon.  
25 If you use B5 you get 5. The economics really

1  
2 work at B20 for the homeowner.

3 CHAIRPERSON GENNARO: But my point  
4 is, and someone who is playing devil's advocate  
5 could say the people already get a 10% break on a  
6 gallon of B20. The market will compel people to  
7 do this. We don't need a mandate because people  
8 are going to just go do it right now. My point is  
9 to what extent if we do the mandate and require  
10 this, what does this do to the economics generally  
11 of bioheat as a fuel and how does that make this a  
12 more cost competitive fuel once we lose the tax  
13 credit whenever that's going to be? Because I've  
14 got to play devil's advocate here. If somebody  
15 was sitting here, they could say at 10 cents less,  
16 everyone could just do it right now.

17 GENE V. PULLO: The reason why is  
18 because if the mandate comes in, they'll be much  
19 more volume of biofuel and the cost will be  
20 competitively coming down. Right not it's a  
21 boutique fuel. People are only using it that know  
22 about it or hear about it. Because of the current  
23 economic conditions it go more competitive. But  
24 in general, if you want to create a renewable fuel  
25 that's going to be sold at market price you have

1  
2 to have a mandate. Because you have to level the  
3 playing field.

4 CHAIRPERSON GENNARO: Because what  
5 you have to do is make that transition from  
6 boutique fuel where it's by definition more  
7 expensive to more generally available in lines of  
8 production and more favorable economics because  
9 you're producing large quantities of it.

10 GENE V. PULLO: The perfect example  
11 I can give you because Metro is also one of the  
12 largest independent sellers of unbranded gasoline  
13 in the City of New York. Four years ago when the  
14 ethanol mandate came in that all gasoline in the  
15 City of New York have 10%, we were required to  
16 become the blender. We bring in unfinished  
17 gasoline, we blend it with 10% ethanol.

18 CHAIRPERSON GENNARO: Pursuant to  
19 the federal mandate because we needed it as an  
20 oxygen aid for air quality issues.

21 GENE V. PULLO: That's right. At  
22 the time that mandate came into play, the ethanol  
23 portion, prior to the mandate, was 30% of the cost  
24 of fuel. It's only 10% by volume. It was 30% of  
25 the cost. Today, the ethanol portion of the

1  
2 gasoline that everybody uses is much than the  
3 actual cost of the gasoline. So it becomes a  
4 competitive fuel. That happens through a mandate  
5 because you have to create an industry.

6 JOHN MANISCALCO: There's no doubt  
7 that the mandate is the driver to get this  
8 initiative done. If you just put it out there as  
9 a boutique fuel or a marketing tool, the majority  
10 of companies will not go into it. I have many  
11 terminals that are waiting. They're not  
12 retrofitting. They're waiting for the mandate.  
13 One the mandate comes they will apply the dollars  
14 to retrofit their terminals. As far as the tax  
15 credit goes, if Gene uses it that's fine, but I  
16 think it's not used quite as much as it needs to  
17 be used. It's going to be use it or lose it.  
18 It's very difficult to go back three years from  
19 now to get it reauthorized. They're going to say  
20 that you didn't use much of it anyway, why should  
21 I reauthorize it again? So we really have to get  
22 this jumpstarted.

23 CHAIRPERSON GENNARO: Thank you. I  
24 appreciate that. I appreciate your testimony. I  
25 appreciate all of your hard work and will continue

1  
2 to try to get this done. Thanks. I appreciate  
3 it. The next panel is Daniel Falcone of Total  
4 Fuel Services, Brent Baker of Tri-State Biodiesel  
5 and Fred Gifford of Interstate Biofuels. I'll  
6 call upon the Counsel to the Committee to swear in  
7 the panel.

8 SAMARA SWANSTON: Can you please  
9 raise your right hands? Do you swear or affirm to  
10 tell the truth, the whole truth and nothing but  
11 the truth today?

12 DANIEL FALCONE: Yes.

13 BRENT BAKER: Yes.

14 FREDRIC V. GIFFORDS: Yes.

15 CHAIRPERSON GENNARO: Thank you,  
16 gentlemen for being here. Daniel and Brent, of  
17 course, I've known for a long time. Mr. Giffords,  
18 I've yet to have the pleasure but appreciate your  
19 being here. I look forward to hearing from you.  
20 I have one prepared statement from Mr. Giffords.  
21 We have a copy of Mr. Falcone's statement. Give  
22 that to the sergeant who can do the distribution.  
23 While we're waiting for that to happen, why don't  
24 we just have Brent go.

25 BRENT BAKER: Thank you, Council

1  
2 Member Gennaro. I appreciate the opportunity to  
3 speak today. My name is Brent Banker. I'm a  
4 longtime advocate of the environment. I've been  
5 an activist for all of my adult life, mostly  
6 working on greenhouse gas emissions. I've been  
7 involved also in natural building, organic foods  
8 and especially in biodiesel. I've been actively  
9 promoting biodiesel in the United States for 14  
10 years. Many of those years I was the director of  
11 a nonprofit organization that educated the public  
12 on the dangers of global warming and about things  
13 like solar power and biodiesel as ways that they  
14 could stand up and fight against global warming.  
15 I'm now the CEO of one of New York City's leading  
16 biodiesel companies. Tri-State Biodiesel, my  
17 company, collects cooking oil from well over 2,000  
18 New York City restaurants, recycles it into  
19 biodiesel fuel and sells it to local trucking  
20 fleets and heating oil consumers. I didn't begin  
21 Tri-State Biodiesel in order to make a quick buck,  
22 but rather started the company as the next logical  
23 step in a lifetime mission dedicated to bringing  
24 this amazing low carbon diesel fuel to wide use  
25 and availability. We have heard a lot of talk



1  
2 about biofuels today and I'm very disappointed by  
3 that. This hearing is not to discuss biofuels but  
4 to discuss biodiesel. The distinction must be  
5 made when we discuss this issue. The media has  
6 done us all a disservice by dumbing down this  
7 discussion by using the word biofuels to try to  
8 talk about specific effects of things. So I hope  
9 that we can try not to make that mistake as we go  
10 forward. Biofuel is a broad term that can mean  
11 many different kinds of fuel from many different  
12 sources. When the media says biofuel they often  
13 mean ethanol made from corn. Biodiesel is a more  
14 specific term that refers to alternative diesel  
15 fuel made from fats and oils. Biodiesel is not  
16 made from corn. In fact, in the U.S. most  
17 biodiesel is made from either soybean oil, waste  
18 animal fat or used cooking oil or some combination  
19 of the three. Saying you don't like biodiesel  
20 because of what you've heard about biofuels is  
21 like saying that you don't like soup because  
22 you're allergic to split peas. People should  
23 really think about that. In preparing these  
24 words, I looked back at the speeches I had made  
25 before this body about this issue. I realized

1  
2 that I had made a speech in early 2005 about this  
3 and have been testifying ever since. In all those  
4 years there's been a lot of talk about biodiesel,  
5 but unfortunately very little action. Still  
6 today, 11 years after the release of a  
7 comprehensive Department of Energy study showing  
8 that biodiesel would yield a 78% reduction in  
9 carbon and give us back three and a half times the  
10 amount of energy used to create it, there's still  
11 very little biodiesel use in the city. It's been  
12 almost six years since NYSERDA released its study.  
13 I recognize Judy Jarnefeld speaking earlier today.  
14 It's been almost six years since that study was  
15 released showing that we have the ability, the  
16 land and the infrastructure to host a biodiesel  
17 industry here in New York State. That it would  
18 create huge clean air benefits and a robust green  
19 collar economy for our state. Still, there is not  
20 a single biodiesel fueling station in New York  
21 City. It's been four years now since the clean  
22 air task force released a study pointing out that  
23 New York City led the nation in premature deaths  
24 resulting from diesel emissions. In the same  
25 year, the American Lung Association in Washington,

1  
2 D.C. released a finding that biodiesel exhaust  
3 could be 90% less toxic for people to breathe.  
4 And yet still to this day the city has taken no  
5 action on getting biodiesel into school buses or  
6 into school boilers. The health advantages of  
7 biodiesel have not been challenged at all here  
8 today. So if we have the chance to lower the  
9 incidence of emphysema and asthma and premature  
10 death for our kids, don't we have a moral  
11 obligation to do so? Are those opposed to this  
12 bill truly comfortable with saying we should let  
13 kids die because this is so awful that we can't go  
14 there? I mean, we really need to ask ourselves  
15 this because there's no reason we can't make this  
16 better as we go along. We have the opportunity to  
17 do something today and I want to really make that  
18 clear. As you have heard today, science is  
19 overwhelmingly supportive of biodiesel being  
20 better for our health and environment and even the  
21 local petroleum industry has embraced this  
22 mandate, or supported it somewhat. Still the  
23 Mayor of the City, who has been a great champion  
24 of health and the environment in the past, sits on  
25 his hands on this issue. I implore the

1  
2 administration that the time is now to take  
3 decisive action on this issue. Pennsylvania and  
4 Massachusetts have already taken steps towards  
5 blending requirements. But without the population  
6 center of the Northeast onboard, the region will  
7 continue to have a patchwork program that will lag  
8 behind the rest of the country and our children  
9 and the environment will continue to suffer.

10 Consider this, according to the EPA, each gallon  
11 of biodiesel we burn instead of petroleum diesel  
12 will displace about 17 pounds of carbon dioxide.

13 If we blend 20% biodiesel into all heating oil in  
14 the city, as the bill proposes, we could

15 potentially be reducing petroleum diesel  
16 consumption by about 200 million gallons. That's  
17 a carbon reduction of about 3.4 million pounds.

18 According to the EPA, that's the equivalent of  
19 taking 280,000 cars off of the road in New York  
20 City every year. If we had passed this mandate

21 three years ago, we'd be on that path today. How  
22 can we really call ourselves an environmentalist  
23 and have the opportunity to remove 280,000 cars  
24 per year with today's technology and today's

25 infrastructure with today's existing supplies and

1  
2 say we don't want to do that because something  
3 better might be coming. It baffles me. I think  
4 we have a great opportunity here. We need to take  
5 it. We really need leadership on this issue and I  
6 know that the administration has really provided  
7 some leadership on these types of issues before.  
8 I can think of particular the smoking ban, very  
9 controversial, definitely a lot of opposition out  
10 there and guess what? They made the hard choice  
11 and people's lives were saved and in the end  
12 people saw it was a great thing. This will be the  
13 same story here. The environmental groups that  
14 have come out against this plan is really  
15 upsetting to me because I am among you. I have  
16 used your studies as the foundation of my work.  
17 So I would strongly consider and request that all  
18 the groups that are opposed to this, let's sit  
19 down and figure out how to make it work. Let's  
20 look at science. Let's forget about one or two  
21 crusaders that maybe have an opinion and let's  
22 look at the mass of science. Let's sit down  
23 together and say that we want the same thing. No  
24 one wants to burn down Malaysia. No one wants to  
25 cause starvation. No one wants to cause more

1 carbon emissions. That's why we do what we do.  
2 So let's sit down and figure out how to do this,  
3 do it now and do it in a smart way. We're smart  
4 enough to do that. Let's smarten up this  
5 conversation and move forward. In closing I just  
6 want to say that I hope that the testimony you  
7 heard here today and the overwhelming scientific  
8 and academic evidence in favor of biodiesel use  
9 will be heard objectively by the administration.  
10 I hope that minds haven't been made up without all  
11 the information. The idea that we should continue  
12 to do the worse thing, continue to provide the  
13 highest levels of pollution, continue to use the  
14 worst fuel possible now until someday in the  
15 future just doesn't make sense. I think that we  
16 should try to use the best thing we have available  
17 today. When low carbon fuel standards come in  
18 tomorrow, we should adopt those as part of this.  
19 When algae comes in, in ten years, we should adopt  
20 that for this. My existence as a cooking oil  
21 producing biodiesel producer would not have been  
22 possible had not soybean farmers got together and  
23 made biodiesel and built an industry. It creates  
24 the infrastructure for the expansion. In other  
25

1  
2 words, you wouldn't build a subway system before  
3 you had a city. In the same way, you're not going  
4 to invest \$50 million or \$100 million or more into  
5 cellulosic ethanol or advanced algae biofuels  
6 until you know that there's some kind of a market  
7 and until there's an infrastructure of companies  
8 that can move that product, that can build those  
9 factories, that can make that product and a  
10 knowledge base. So rather than saying we're not  
11 going to walk until we can fly, we should say we're  
12 going to walk down the road and as we get strength  
13 we'll start to run and maybe eventually we'll get  
14 to where we want to get. That's basically what I  
15 have to say. Again, I really appreciate the  
16 opportunity to speak to the Council and to the  
17 administration. I certainly invite this dialogue  
18 as being an ongoing dialogue to go forward.

19 CHAIRPERSON GENNARO: Thank you,  
20 Brent. I appreciate your comments as always.  
21 I'll comment or question once we hear the rest of  
22 the panel. Danny, I cut you off before, but I got  
23 your statement here. I'm very happy to get your  
24 good testimony. Just state your name for the  
25 record and you can commence.

DANIEL FALCONE: I'm Daniel

Falcone. Thank you, Councilman Gennaro for having the leadership to move forward with this bill. I want to say I feel privileged to be a part of such a wide support group. The American Lung Association and the NBB to support for my local petroleum marketers is a tremendous amount of support. Hopefully the administration will consider that this isn't just a few local guys getting together to discuss biodiesel. Before I move on with my testimony, I've been hearing things about low sulfur content caps from the administration and others. I've heard testimony today about ultra low sulfur products, which I'm in favor for. It's not sustainable in today's economy to have ultra low sulfur heating oil. It's not sustainable to require it when it's not available in the marketplace. Also, I think we've heard this and I think it's something that can be proven by other scientists that ultra low sulfur fuel or petroleum fuels are not renewable. They're not sustainable. Ultra low sulfur fuel doesn't come out of the ground as an ultra low sulfur product. It has to be processed, just like



1  
2 any other fuel. I wanted to make those comments  
3 known because sometimes I keep missing it. I  
4 listened very carefully to Mr. Strickland's  
5 testimony this morning. I do appreciate and  
6 respect his comments. I remember a couple of  
7 years back when they contacted us about moving  
8 this forward. I find it hard to believe that the  
9 administration wouldn't take any type of  
10 advancement. Because he did admit that there  
11 would be a reduction in carbon and there would be  
12 a reduction in sulfur and there would definitely  
13 be a help, but not enough. I was wondering if  
14 anybody missed that because what's that mean not  
15 enough. To wait for something that's not  
16 practical, not feasibly acceptable in the next  
17 three to five years as an ultra low sulfur  
18 product, being a petroleum marketer I know that.

19 CHAIRPERSON GENNARO: I'll have  
20 questions about that after your statement. We'll  
21 talk about sulfur in a minute.

22 DANIEL FALCONE: Thank you, again.  
23 First let me thank the Council for the opportunity  
24 to speak on this very important piece of  
25 legislation and help the advance of the use of a

1  
2 clean burning renewable. My name, again, is  
3 Daniel Falcone. I am the owner of Total Fuel  
4 Services Corporation, a retail/wholesale  
5 distributor of diesel and biodiesel fuels. My  
6 retail company has been supplying a B20 bioheat  
7 fuel to my customer base for the last two years.  
8 Approximately two and a half million gallons of  
9 biodiesel blended fuel. I can honestly and safely  
10 report no negative issues have been generated from  
11 the use of this fuel. Ever since September 11 of  
12 2001, I have become very passionate in the  
13 alternative fuel industry. I believe strongly in  
14 supplementing out dependency on foreign fuel. Not  
15 only for national security but for the  
16 reinvestment of our economic and energy  
17 independence. I became a member of the Clean  
18 Cities Program, a member of the Environmental  
19 Business Association, I was elected vice chair of  
20 policy for the Biofuels Industry Committee and I  
21 am a board member of the Connecticut Biodiesel and  
22 Bioheat Association. I've taken a very active  
23 role in advocating biodiesel to the public and  
24 private sectors. I'm working with my constituents  
25 in the petroleum markets by expanding an

1  
2 opportunity to available biodiesel product in a  
3 very economic and sustainable fashion. I believe  
4 biodiesel not only needs to be environmentally  
5 sustainable but economically sustainable. I've  
6 taken the position as a Northeast wholesale  
7 manager of one of the largest regional  
8 distributors of biodiesel, Ultra Green Energy  
9 Services. Ultra Green distributes a biodiesel  
10 produced from non-food resources such as recycled  
11 oils and reclaimed fats from industrial  
12 processing. To help mature the market for  
13 biodiesel to be implemented with traditional  
14 heating oil and diesel fuel, Ultra Green offers  
15 risk managed programs to wholesale fuel terminals  
16 and retail distributors. They price contracts for  
17 fuel against market indexes such as Platts, Opus  
18 and Nymex. These are the very markets the current  
19 petroleum distributors use to purchase and sell  
20 fuel daily. By pricing against these markets  
21 Ultra Green helps the petroleum markets acclimate  
22 to utilizing renewable fuel in a very familiar,  
23 mature and economically sensible way. They take  
24 inventory positions with terminal storage  
25 facilities and offer financing for the

1  
2 implementation of proper storage, blending and  
3 distributing equipment. I am proud to have  
4 aligned myself with a company that decided to  
5 invest in renewable fuels. Ultra Green is  
6 prepared to help with the growth of this renewable  
7 fuel to the New York metropolitan area and to  
8 assure the City Council and the Mayor's Office  
9 that it maintain economical sustainability with  
10 this renewable fuel. No one here today has been  
11 spared from the recent financial crisis. Our  
12 economic fears and insecurities are at an all-time  
13 high. My goal today, believe it or not, is not to  
14 sell biodiesel here but to be a part of something  
15 historic, something bigger than me. As far as I'm  
16 concerned, New York is one of the cornerstones of  
17 our planet. It is a direct reflection of our  
18 society's consciousness. Today we have an  
19 opportunity to rise above the status quo and above  
20 our current situation by helping to reinvest in  
21 ourselves. Biodiesel is just one piece of the  
22 alternative energy puzzle for us to work with. We  
23 need to start today. We can always do better but  
24 we need to start somewhere. Bioheat fuel works.  
25 It is sustainable and it is available today.

1  
2 Please let us not lose this opportunity to  
3 reinvest in ourselves. We need it. I want to  
4 thank the Council again for the opportunity. I  
5 look forward to the advancement of this bioheat  
6 mandate.

7 CHAIRPERSON GENNARO: Thank you,  
8 Danny. It's always a pleasure. I appreciate your  
9 advocacy and support of what we're trying to do  
10 here. Always good to be with you. Mr. Giffords,  
11 nice to meet you. Thank you for being here. Just  
12 for a little housekeeping, after this panel, my  
13 notes indicate that we have one more witness, Mr.  
14 Issel, is that right? Is Mr. Issel in the room?  
15 So we have two more witnesses. You'll be next,  
16 Mr. Issel. Mr. Giffords, I would be happy to have  
17 your testimony. State your name for the record  
18 and proceed.

19 FREDRIC V. GIFFORDS: Chairman  
20 Gennaro and Members of the Committee on  
21 Environmental Protection, my name is Fred  
22 Giffords. My business background is varied, but I  
23 spent my first 30 years in my family's retail and  
24 wholesale fuel oil business, which operated in New  
25 York and Long Island. I am also past president of

1  
2 the Empire State Petroleum Association. Thank you  
3 for allowing me to come here today to speak to you  
4 about the advantages of using biofuel for heating  
5 and transportation as I am presently the chairman  
6 of Interstate Biofuels. Interstate is a project  
7 development company that is in the process of  
8 building, owning and operating four biofuel  
9 production facilities in New York, Massachusetts,  
10 Connecticut and Virginia. Interstate's facilities  
11 will each produce about 15 million gallons of  
12 biofuel at a total project cost in excess of \$115  
13 million. Interstate will utilize biodiesel  
14 production technology that is feedstock flexible  
15 with a focus on using non-food feedstocks such as  
16 poultry fat, choice white grease, byproduct corn  
17 oil, Jetropha oil and algae oil. I have divided  
18 my comments today into four areas: air quality,  
19 global warming, energy security and biodiesel  
20 sustainability. I think I pass on the health  
21 benefits because I think we've heard enough of  
22 that today.

23 CHAIRPERSON GENNARO: Sure. And  
24 the hour is late.

25 FREDRIC V. GIFFORDS: I'll cut this

1  
2 as short as I can. The U.S. NREL has stated that  
3 energy security is the number one driving force  
4 behind the U.S. biofuel program. Thus,  
5 significant benefits can accrue to the U.S. from  
6 the adoption of biofuel while all of the other  
7 issues are being debated and approved. President  
8 Obama and Vice President Biden have a  
9 comprehensive plan to invest in alternative and  
10 renewable energy, end our addiction to foreign  
11 oil, address the global climate crisis and create  
12 millions of new jobs. Every country and region  
13 has a need for new genetically improved and  
14 appropriate oil seed crops to use as feedstocks  
15 for biodiesel production. We believe that the  
16 emphasis should be on sustainable agricultural  
17 practices using marginal land that does not  
18 require extensive irrigation or fertilization and  
19 does not disrupt food supplies. If we are to make  
20 the right choices as a society, we must avoid the  
21 pitfalls of polarized discussions. We encourage  
22 instead an open and honest debate about energy  
23 security and how to provide a sustainable energy  
24 supply. No option is without its downside. The  
25 reality is that heating oil and diesel fuel have a

1  
2 negative energy balance. Let us engage in an  
3 intelligent and informed dialogue about energy so  
4 that we can make sound choices. We owe that to  
5 ourselves as a nation, to our children and to  
6 future generations. As previously stated,  
7 Interstate is focusing on second and third  
8 generation feedstocks, such as animal fats, choice  
9 white grease, Jetropha, byproduct corn oil and  
10 algae. The biofuels industry in the U.S. is  
11 relatively new and evolving very quickly in both  
12 the design of the manufacturing facilities and the  
13 feedstocks used to make the product. In  
14 conclusions, New York City policymakers must pass  
15 the bioheat act of 2007 to guarantee the creation  
16 of a local market that will jumpstart a local  
17 biodiesel industry, which will generate a  
18 substantial number of jobs, a considerable  
19 investment in the city and that will also justify  
20 the huge financing, design, permitting and  
21 construction of the infrastructure necessary to  
22 produce and distribute biodiesel, all of which  
23 takes years to accomplish. As a businessperson I  
24 can tell you with certainty that any further delay  
25 in establishing the mandates will push the



1  
2 timeline for local infrastructure development out  
3 further, perhaps jeopardizing it altogether and  
4 will increase the infrastructure costs, petroleum  
5 consumption and greenhouse gases and toxic  
6 emissions in the interim. We view the bioheat  
7 mandates as critical and recommend they be  
8 implemented quickly and without a sunset  
9 provision. Biodiesel is the only biofuel ready  
10 for primetime that can have positive tangible  
11 measurable results in a short timeframe. The New  
12 York City Council as policymakers and we as  
13 businesspeople must act prudently on the  
14 information we have. We must avoid analysis  
15 paralysis. Doing nothing amounts to losing ground  
16 and the stakes are way too high. Accordingly,  
17 Interstate Biofuels supports Intro. 594 and 599 to  
18 encourage actions that most reasonable people  
19 agree will lower GHG and toxic emissions, improve  
20 health, improve local economies, reduce the  
21 consumption of imported oil and improve national  
22 security. New York City has the opportunity to  
23 become the leader in renewable energy in the 21st  
24 Century. I'd like to end my testimony with some  
25 words from Franklin D. Roosevelt. "One thing is

1  
2 sure. We have to do something. We have to do the  
3 best we know how at the moment. If it doesn't  
4 turn out right, we can modify it as we go along."

5 Thank you.

6 CHAIRPERSON GENNARO: Thank you,  
7 Mr. Giffords. Nice to meet you. I appreciate  
8 your perspective. I'm just going to play devil's  
9 advocate and show what we're kind of up against  
10 and what the administration is up against. We had  
11 a gentleman come forward earlier from the Habitat  
12 Map. He has a statement here with 19 footnotes.  
13 This is what we're dealing with. People are  
14 campaigning against this.

15 BRENT BAKER: He's just one person.

16 DANIEL FALCONE: I also believe  
17 he's the guy that said the only product being used  
18 for making biofuel is soybean oil. That's not the  
19 case anymore.

20 BRENT BAKER: He also said there's  
21 going to billions of gallons of biodiesel in 2009.  
22 That's so far outside of the realm.

23 CHAIRPERSON GENNARO: I'm not here  
24 to make his points, but just to sort of  
25 characterize the syndrome. We're dealing with

1 well-intentioned folks the World Hunger Year and  
2 other folks who have gotten a lot of play. Our  
3 task, which we'll talk more about in a post-  
4 hearing setting, is what we do to sort of coalesce  
5 our message with some of the points that have been  
6 made today. For example, Brent, this is the first  
7 time I heard about the 280,000 cars. This  
8 resonates with people. I think we have to start  
9 kind of a commonsense movement to indicate that  
10 these are the benefits. This is how we can get  
11 this done. This is our commitment to  
12 sustainability now only to be increased as we go  
13 forward as standards work their way into existence  
14 and other technologies work their way onto the  
15 playing field. It's time critical in that we're  
16 dealing with this finite tax credit from the state  
17 that's not going to be there forever. We have an  
18 obligation to make our move now. I think this is  
19 the case that has to be made to both this  
20 institution and to the administration in a way  
21 that let's folks know that this is something that  
22 has to happen. The cost of not doing it is having  
23 those 280,000 cars stay on the road and the health  
24 consequences of that. You put a dollar sign on  
25

1  
2 those health consequences. What are the costs of  
3 increased lung disease and asthma and everything  
4 associated? We have to start putting price tags  
5 on that. Letting people in this institution and  
6 then that this is what people expect of their  
7 government. If we don't get this done then you've  
8 failed us. You had the ability to do it. The  
9 governor gave you this tax credit and you didn't  
10 get it done. Not everything you do as a Council  
11 Member or a Speaker or as a Mayor is going to have  
12 worldwide acclaim or citywide acclaim. You got to  
13 break some eggs to get things done. This is what  
14 we expect of our leaders. My plan going forward  
15 is to take this from hearings that we have from  
16 time to time and to create a real mechanism. A  
17 previous witness talked about a task force or  
18 whatever it is, or some sort of ongoing dialogue  
19 that I'm going to do my best to put forward  
20 because I'm just not giving this thing up. I have  
21 my members that I'll deal. I have the Speaker's  
22 Office. I have the good people in the Office of  
23 Long-Term Planning and Sustainability. I thank  
24 you for joining me in this effort because I am  
25 absolutely not giving this up. We will figure out

1  
2 how we can organize and coalesce. Fortunately I  
3 was glad to hear President Obama talk about this  
4 last night. It wasn't really the State of the  
5 Union, right? It was a speech but it wasn't the  
6 State of the Union.

7 DANIEL FALCONE: It was just a  
8 speech.

9 CHAIRPERSON GENNARO: It looked  
10 pretty grand though. We have to capitalize on  
11 that. We have to use this current tax credit  
12 while we have it. We've got to get this done or  
13 we're going to feel like we really failed a lot of  
14 people. That's just like not an option. With  
15 that said, I'd like to thank all of you for your  
16 ongoing commitment to what we're doing here. Hang  
17 around and we'll talk a little bit after the  
18 hearing is over. We have Mr. Bernardo Issel who  
19 we're going to hear from. We appreciate you being  
20 here today. Bernardo Issel, is that right?

21 BERNARDO ISSEL: Yes, Bernardo  
22 Issel.

23 CHAIRPERSON GENNARO: Like the  
24 basketball player, Dan Issel?

25 BERNARDO ISSEL: Exactly, but

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regrettably of no relation.

CHAIRPERSON GENNARO: Samara will give you the oath and then you can state your name for the record and proceed with your testimony.

SAMARA SWANSTON: Sir, would you please raise your right hand? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth today?

BERNARDO ISSEL: Yes.

CHAIRPERSON GENNARO: Thank you, Mr. Issel. Please state your name and the floor is yours.

BERNARDO ISSEL: Hello, my name is Bernardo Issel, a resident of New York City. I appreciate the opportunity to address the Council on this issue. I compliment the good intentions of those supporting the use of biofuels or biodiesel towards diminishing global warming and air pollution. However, I'm deeply concerned that this effort may be misguided and perhaps may adversely contribute to climate change and augment the pollution of the environment. Please consider that biofuels have been denounced by various visionary people, or perhaps the term used by a

1  
2 previous speaker, crusader in the environmental  
3 and food community, including Jane Goodall, Lester  
4 Brown and Michael Pollan. Just last year speaking  
5 before 1,000 or so New Yorkers who had lined up  
6 around the block to hear him speak at PS 1 in  
7 Queens, Michael Pollan denounced biofuels as "a  
8 gross crime against humanity." Who of such  
9 acclaimed stature and integrity can the advocates  
10 of biofuels and biodiesel point to? Robert Bryce,  
11 author of "Gusher of Lies: The Dangerous Delusions  
12 of Energy Dependence," and a very astute analyst  
13 on energy policy, though by no means a tree hugger  
14 has recently published various essays on the  
15 website [counterpunch.org](http://counterpunch.org) critical of biofuels.  
16 One of them noted that over 14 studies, "have  
17 exposed the high cost of ethanols and biofuels."  
18 In his book, "Gusher of Lies," he points out that  
19 many of the advocates for biofuels as a means  
20 towards energy independence were also strong  
21 advocates for the war on Iraq. On February 14,  
22 2009, the blog "Findings" published by a science  
23 the publication of the American Academy for the  
24 Advancement of Science, the preeminent science  
25 organization in the U.S. posted under the title,

1  
2 "Fill 'Er Up with Rainforest" a summary of  
3 findings of a symposium on biofuels stating that  
4 "the ethanol produced on millions of new hectores  
5 of corn in the United States in the last two years  
6 will increase deforestation in the Amazon and  
7 result in large increases in carbon emissions to  
8 the atmosphere. When farmers in the U.S. planted  
9 more corn and less soy in 2007, Brazilian farmers  
10 started planting more soy, an increase of 500,000  
11 hectores. Often they cut down and burn rain forest  
12 to plant more fuels." As far as I know, soy grown  
13 in the U.S. was not discussed. I'm going to look  
14 into this more. It would follow that if we in the  
15 U.S. are diverting soy into biodiesel this will  
16 decrease the overall pull of soy available for  
17 food and derive an increased conversion of rain  
18 forest to soy production globally. I'm concerned  
19 that the Council has received unwise counsel from  
20 certain advocacy groups in regards to biofuels,  
21 namely NRDC and to a certain extension the New  
22 York League of Conservation Voters, which was a  
23 creation of the leadership of NRDC. NRDC has been  
24 at the forefront of supporting biofuels. While  
25 the organization is widely held in esteem as a



1  
2 worthy group by the mainstream press, which often  
3 uses the term the earth's best defense or the most  
4 powerful environmental group in the U.S., terms  
5 the group uses on itself and by Hollywood elite.  
6 I bring attention to past advocacy of NRDC which  
7 raises a question about the soundness of its  
8 judgment. NRDC played a leading role in  
9 supporting and defending deregulation of  
10 electricity of California in the 90s. We saw that  
11 turned out to be a disaster. In regards to the  
12 takeover of a power company in Oregon by Enron,  
13 the group's energy co-director testified that Ken  
14 Lay could be trusted. This we later saw to be  
15 grossly mistaken. Related to food matters, NRDC  
16 was a leading supporter amongst environmentalists  
17 for the North American Free Trade Act, better  
18 known as NAFTA. This trade agreement comes up in  
19 political primaries in regards to loss of jobs in  
20 the United States. On environmental matters, the  
21 trade agreement I think is generally viewed as  
22 having been a failure. Less discussed is the role  
23 of NAFTA in diminishing market protection for  
24 Mexico's corn farmers from heavily subsidized corn  
25 from the United States. Analysts have decried how

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2 this effect of NAFTA has undermined rural  
3 communities, contributed to immigration of the  
4 United States and led to food instability when  
5 Mexico, with diminished internal capacity to grow  
6 corn encountered increasing costs for corn from  
7 the United States in the last years, driven by  
8 various factors including the effects upon corn  
9 prices of the drive towards biofuels. Just last  
10 week on a New York City panel regarding the food  
11 crisis and biofuels, noted food advocate Frances  
12 Moore Lappe, author of "A Diet for a Small Planet"  
13 noted the growth of 50 million children had been  
14 stunted on account of food crisis. The role of  
15 crops going to biofuels in this cannot be  
16 discounted. I respect and applaud the concern for  
17 the people suffering from asthma but I feel very  
18 awkward about weighing asthmatic situations in the  
19 Bronx versus stunting of growth globally because  
20 of the interconnectedness of food and agricultural  
21 systems around the world. Something that's been  
22 driven by trade policies that have been pursued by  
23 business interests in the United States and  
24 government interests. In regard to the above, I  
25 would urge you to have hesitancy regarding the

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2 counsel of NRDC. I finish by knowing that an  
3 endeavor for which New York has been widely known,  
4 that of high finances practiced by Wall Street,  
5 has turned out to be quite calamitous and harmful,  
6 both to New York and the globe as well. I urge  
7 New Yorkers to ponder whether this drive towards  
8 biofuels may be just as harmful and mistaken. In  
9 this vein, Hollywood actress, Kyra Sedgwick, wife  
10 of actor Kevin Bacon, has collaborated with NRDC  
11 and touted it that generators on her film sets use  
12 biofuels. Sadly, we recently learned that  
13 Sedgwick and Bacon lost their savings which they  
14 had entrusted to Bernie Madoff. I fear that  
15 Sedgwick's trust of NRDC for guidance on biofuels  
16 may be as much a folly and we would be wise to  
17 reconsider this direction towards addressing  
18 global warming. Just a quick couple of comments.  
19 There's a very strong growing foody movement in  
20 New York and around the United States. I think  
21 this is a constituency that could become very  
22 concerned and active on biofuels. Politicians may  
23 at a later time find this issue being raised.  
24 There's also been a very strong advocacy community  
25 here in New York City related to Darfur and other

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2 crisis situations. It was noted specifically in  
3 Darfur that relief programs were having a harder  
4 time feeding people in Sudan and elsewhere because  
5 of the high price of food driven by biofuels. So  
6 there are various other issues which do bear upon  
7 concerns of people here. I applaud that you're  
8 trying to weigh these. I stand forth along with  
9 Mr. Heimbinder and others as a person concerned  
10 about these. Thank you so much.

11 CHAIRPERSON GENNARO: Thank you,  
12 Mr. Issel. You've put forward your case in a very  
13 compelling way. I think we're going to disagree a  
14 little bit. I certainly admire your passion and  
15 your verve and the giving of your time to be here.  
16 I'm getting paid to be here and you're not. I  
17 certainly have an appreciation for that. I think  
18 your analysis regarding soy is a little off. We  
19 have people here that you may be able to talk to  
20 about that. In your short statement you've  
21 managed to weave in Darfur and Bernie Madoff and  
22 all kinds of things are sort of spiraling around  
23 the planet. I think your appearance forth today  
24 indicates the scope of work that those among use  
25 that want to advance, not biofuels, but bioheat

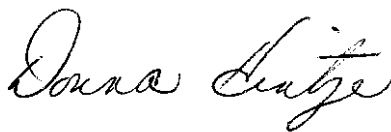
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2 and I think you fall into a little bit of the  
3 thing about confusing corn-based ethanol with what  
4 we're trying to do here in New York City which is  
5 bioheat. But your appearance and your testimony  
6 here today to me spells out the type of work that  
7 we have to do to bring what I believe is correct  
8 information forward and make our case that the  
9 policy that we're formulating has a huge upside  
10 for the health and well-being and overall economy  
11 of New York City and does not place the planet at  
12 risk. But there are many well-intentioned people  
13 how have a lot of information that we have to do a  
14 better job putting forward what we want to do here  
15 in New York City, why we want to do it and why we  
16 think it's the best way to go with everything we  
17 can possibly do regarding the sustainability  
18 issues that we think are not as dire as those that  
19 you have characterized. But there are other  
20 biofuels that may be much more problematic which  
21 we use. I welcome you before this committee this  
22 time and every time. We'll certainly give due  
23 consideration to your views and the people that  
24 you talked about that opined on this topic right  
25 here in New York City like at PS 1. I was not

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aware of that. I am now aware of that thanks to  
you. You have had the last word here and I  
certainly appreciate you spending time and waiting  
patiently to give your views to this committee.  
For that I thank you. With no one else wishing to  
be heard, this hearing is adjourned.

C E R T I F I C A T E

I, Donna Hintze certify that the foregoing transcript is a true and accurate record of the proceedings. I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.



Signature\_\_\_\_

Date March 23, 2009