

STATE OF NEW YORK : COUNTY OF ROCKLAND
TOWN OF STONY POINT : PLANNING BOARD

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IN THE MATTER
OF
NEW PLANET SUSTAINABLE FUELS

JOINT PUBLIC INFORMATIONAL MEETING

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James A. Farley Elementary School
Thursday
January 8, 2015
7:00 p.m.

PLANNING MEMBERS:

- THOMAS GUBITOSA, CHAIRMAN
- PETER MULLER, VICE-CHAIRMAN
- EUGENE KRAESE, BOARD MEMBER
- ERIC JASLOW, BOARD MEMBER
- GERRY ROGERS, BOARD MEMBER
- MICHAEL FERGUSON, BOARD MEMBER

TOWN BOARD MEMBERS:

- GEOFFREY FINN, SUPERVISOR
- KARL JAVENES, COUNCILMAN
- JAMES WHITE, COUNCILMAN
- THOMAS BASILE, COUNCILMAN
- JAMES MONAGHAN, COUNCILMAN
- DOUGLAS J. JOBSON, DISTRICT 1 LEGISLATOR

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APPEARANCES:

JOHN FURST, ESQ., Special Counsel Planning Board
STEPHEN MANDRACCHIA, ESQ., Co-Counsel for Applicant
GARY R. SMITH, New Planet Sustainable Fuels
JOHN CRUIKSHANK, New Planet Sustainable Fuels
THOMAS YONGE, PE, Golder Associates
CHRISTOPHER J. DOHERTY, TRI, Inc.
SHAWN FREITAS, TRI, Inc.
MARY PAGANO, Clerk to the Planning Board

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SUPERVISOR FINN: Good evening,
everyone. If I could just have your
attention for a few moments before we start.
First, let me introduce myself. I'm
Supervisor Finn from the Town of Stony Point.
I just want to take this opportunity to say
thank you for coming out on this cold,
wintery night here. I know it's really
brutal out there tonight, but everyone is
here because we all care about our community.
We want what's best for our community.

This is an informational meeting that
we're going to learn a lot about this plant
tonight. We're going to listen and we're
going to respect the men and women who are
going to speak here tonight. We're not going
to have any yelling from the crowd. We're
not going to have any of that. This is going
to be a very respectful meeting.

I have to thank first and foremost the
North Rockland School District, Paul Rooney
and everyone on the board for making this
happen here tonight at Farley School. So we
thank you so much for that.

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At this time before I turn it over, this is actually a Planning Board meeting. You'll see my Planning Board to the left. Chairman Gubitosa will introduce them. But before that, I'd like to introduce the Stony Point Town Board and some other Stony Point elected officials in the room. We have Councilman Basile. Next we have Councilman Monaghan. Councilman Javenes. Councilman White. Legislator Jobson. Also in the crowd tonight from Stony Point we have Assemblyman James Skoufis is here. And we have two other Stony Point elected officials, Larry Brissing, our Superintendent of Highways is here and our Town Clerk, Joan Skinner is here.

Again, I just ask that we have respect for everyone talking here tonight. This should be very interesting. We're learning along with you. That's what this is about. We're all out here tonight because we care about our community as this Town Board does. You can put your faith in us and we are going to give you the best we can. We are not

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going to shove anything down anyone's throat here. We want what is best for this town as you do. That's why we're all here.

And before we go any further, if I could please ask you all to join me and stand for the Pledge of Allegiance.

(Pledge of Allegiance)

SUPERVISOR FINN: At this time I'm going to turn this meeting over to our Chairman of the Planning Board, Mr. Tom Gubitosa. I'm sorry, I missed one very important person I forgot to introduce. We have from the Rockland Business Association, a member of the Governor's Economic Council for the Hudson Valley, we have Al Samuels here as well. A very important person from Rockland County and the Hudson Valley. Al, welcome.

CHAIRMAN GUBITOSA: Thank you, Geoff. As Geoff said, I'm Tom Gubitosa, Chairman of the Planning Board. With me tonight Gerry Rogers, Pete Muller, Mike Ferguson, Eric

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Jaslow, part of the Planning Board.

Like Geoff said, this is a joint informational meeting being held by the Planning Board and the Town Board. Just to let everyone know, this is the first of many meetings about New Planet's proposal. The purpose of this meeting is for New Planet to provide information to the boards and the public about itself, its proposed facility and its proposed waste to renewable biofuel process.

Numerous opportunities will be given to the public for input in the future. This will be a lengthy review process and the public will have ample opportunity to comment on the proposal as more information on the environmental impact becomes available.

After the presentation, we will take a break and collect index cards from members of the public. They should be circulating right now. And basically the public can write down any questions it has about the presentation and submit them to the Planning Board at the break. Please include your name and contact

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information on the index card in case we don't get to the -- if we don't address your question tonight, someone from New Planet will get back to you. We also note for tonight all the information or all questions be limited to the presentation.

We all have questions and concerns about the environmental issues like traffic, air emissions, the wetlands, the noise, visual and community character and each and every one of those concerns will and must be addressed during the SEQRA environmental review process. For now we are trying to understand the operational end and the proposal so we can properly anticipate the environmental issues that should be addressed.

With that being said, I would like -- I'm going to turn over to our attorney, John Furst, just to give everyone an update on where we stand with the DEC. And like Geoff had said before, this is not a town facility. This is a school facility. So if you walked in you saw signs on the door to the

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cafeteria, like the cafeteria rules that I'd like to follow: Be polite, be respectful.

Right now I'm going to introduce our attorney, John Furst.

MR. FURST: Thank you, Chairman. I just want to go over a couple of quick procedural things before we start the meeting.

I'm special counsel for the town. First let me provide a little procedural history here. Just to catch up some of the folks that are here. Back in September 2014, a petition was submitted to the Town Board requesting a zoning text change. Back in October an additional petition for a zoning map change was then submitted to the Town Board. Simultaneously with that petition there was an application to the Planning Board for the proposed facility. After all that information was submitted, the Planning Board declared its intent to be Lead Agency in connection with the State Environmental Quality Review Act. They circulated to over 40 different agencies and to notify everybody

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of their intent. In early December the Department of Environmental Conservation expressed their intent to be Lead Agency. So at the last Planning Board meeting after we got the letter from the Department of Environmental Conservation, the Planning Board authorized myself and the Chairman to reach out and coordinate with the DEC with respect to the Lead Agency status. The Planning Board had no objection to the DEC being Lead Agency. However, the Planning Board just wanted to make sure that they were a very interested agency and coordinating closely with the Department of Environmental Conservation because obviously there's a lot of local zoning and land use impacts in connection with this project.

So this morning we did have a meeting with the Department of Environmental Conservation. We have been assured by the DEC that the Planning Board will play a very active role in this process. It was a very positive meeting. We look forward to working with the DEC on this project and reviewing

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all the environmental impacts from this proposal.

That's kind of one of the reasons why given the DEC's impending Lead Agency declaration, it makes sense to forego any major discussion about the environmental impacts until the DEC is actively involved. Since they are going to be the Lead Agency on this project, they should be here and they should be around to hear all the comments on it.

So we would like to focus the questions on any of the presentation from New Planet regarding the technique, the science, the technicalities involved with the proposal.

Again, we are kind of hoping to educate everyone here, including the board members as well as members of the public about the process, about New Planet, the applicant itself and save all the environmental procedural questions until the DEC gets fully involved.

I'll turn it back over to the Chairman quickly.

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CHAIRMAN GUBITOSA: Thank you, John.
Like John said, tonight is just the first of many meetings. This is just an educational meeting. Not only for the public, but for the Planning Board and the Town Board. We still need to know a lot of the information. So tonight is an education for everyone. So when I turn it over to New Planet, they are going to give a presentation. They're going to go over the proposed facility, the technology involved, so I would ask that you give them your attention, to let them finish their presentation and not interrupt because it's going to be detailed exactly what's going to happen at the plant.

So like we said in the beginning, index cards will be circulated. You can write your questions on that, name, number, contact. In case we don't get to you, someone from New Planet will. Everything is going to be answered. Hopefully they'll get to your questions. If not tonight, later on. Like we said, it's educational. We are learning, you're learning.

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So I'd like to turn it over to John from New Planet. Thank you.

MR. SMITH: John is going to talk later. I'm Gary Smith, CEO of New Planet Energy.

Town Board, Planning Board, citizens of the region, we thank you for attending tonight. I'd like to say that it's my pleasure to be here representing New Planet Energy for this informational meeting. I think you are going to learn a lot of what we're really doing.

I'd like to introduce two of our board members who will not speak tonight. Our Chairman, Jay Johnson, and our Vice-President and Secretary, George Bauer.

And I think just by our attendance here, it shows by your attendance how important we think this meeting is and this project is to the community.

Again, I said I'm proud to be here and associated with this technology and the support staff who you will hear from tonight. I've been asked to give my background as to

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what I've done to entitle me to be called CEO of New Planet Energy which I'm very proud of. My background includes Cummins Engine Company beginning in about 1980 with alternative engines. CEO of Hercules Engine Company. CEO of a public company called High Plains Corporation in Wichita, Kansas where we had ethanol plants in Kansas, Nebraska and New Mexico. And I was involved with New Planet Energy in our starting plant in Vero Beach which you will hear about later.

During this time I was on the board of the Natural Gas Vehicle Coalition. I was Chairman of the Renewable Fuels Association and I served on the Abengoa board which we sold High Plains to for three years.

I only point this out to show my experience of the various technologies in the marketplace. My association with New Planet Energy as I said goes back to our Vero Beach plant and now with our plant in Stony Point. I hope that we get that plant through.

I know you will all be pleased with the technology you will hear tonight and how it

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will fit safely into your community while increasing the employment and tax base of the region.

Now I'd like to introduce John Cruikshank. John is our President and co-founder of New Planet Energy. He's been the boots on the ground and our face of Stony Point. I think many of you who are here will recognize him. John really has worked hard to make this come to fruition. John, would you come on up and speak.

MR. CRUIKSHANK: Good evening again. John Cruikshank, President of New Planet Energy. At New Planet Energy, we are developers of clean energy projects, in particular converting waste into clean electricity and biofuels. Our proposed project in Stony Point represents a nearly \$600 million investment in what we believe will be of great value to the community.

In our experience we've tried to follow a community-based siting and development project which embraces a community and political leadership and the residents in a

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collaboration of putting this project together.

Essentially if the project doesn't work for you, it doesn't work for us. So we need you to understand everything you can about the project, our technology, who we are, what we stand for and the experience what we have done in the past in working with the communities in bringing a project like this to fruition.

Several of your state and local political leadership have visited our project in Vero Beach and communicated with the county commissioners, with other political leadership and with the residents down there to qualify both New Planet and the approach we've taken to siting and development.

Again, I want to stress that this is the first in a series of public meetings, hearings and workshops we hope to put on in coming months where the public will be able to participate and interact with us, getting questions answered, understanding this company, our technology, the parties that we

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are working with in the community and getting to a level of comfort that you would need that I would want if I were in your shoes. So please understand we are coming into the community not with an approach this is what we are going to do, we are coming in this is what we would like to do. We are introducing it to you. We want to educate you, engage you in a discussion of what we are and what we are not because there can be at times misunderstanding and misinformation. We want to clear that all up and that will take place over the next coming months at these meetings.

So we welcome you in the future. We've set up a website that will provide further information and ongoing updates.

And I guess with that I'm going to go to the next level and introduce my associate, Tom Yonge. Thank you all for joining us tonight.

MR. YONGE: Thank you, John. Thank you, Planning Board. And thank you, Town Board.

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Before I get into my quick discussion, one thing John forgot to mention was there are information sheets and fliers in the back, that has the website address, contact information and a little bit about New Planet and the project. So please feel free to take as many of those as you like.

Okay, as John mentioned, my name is Tom Yonge. I am an environmental consultant, an engineer assisting New Planet with this project. I really appreciate the opportunity to speak with you here tonight.

The company I work for is a company called Golder Associates. I'm a practice leader for the air engineering and project development group. Golder is a global consulting company that has about 1,500 employees in the U.S. Two of our offices are relatively local here. We have one in Newark and one in Buffalo. We will be employing a significant number of staff in those offices to help us as we go through this project.

So a little bit about me and what I do and what my role will be on this project. My

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practice focus is really helping quantify and qualify environmental impacts associated with waste conversion projects. This being a waste conversion project. So quickly, when you hear that term, it's a project that basically employs a conversion of discarded item such as municipal solid waste or MSW which is a term you'll hear a lot tonight, wood waste, wastewater sludge, anything people don't want to -- a beneficial reuse to a product that has value. So that could be renewable diesel like this project, it could be bioethanol, it could be power, it could be fertilizer. There's any number of processes that we can do and we have the technology for in the marketplace to convert these described materials.

I have the good fortune of having worked on one of these waste conversion projects with not only New Planet Energy, but also with TRI, who's our technology partner on this project.

I was also on the project team for the Vero Beach project that John mentioned and

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it's one of the proudest projects that I've worked on in my professional career. I really enjoyed it. It went well. It's really been something of a feather in my cap so to speak.

So beyond that, what are we doing? One thing we would like to do on this project is helping companies implement sustainable practices throughout the design, construction and operation process. When we say "sustainable practices," what does that mean? Well, the first thing we'd like to do when we are trying to incorporate sustainability is doing thorough options analysis. There's lots of sites. There's lots of technologies, there's lots of sizes, all sorts of things in the decision-making process that we would like to help companies like New Planet go through as they are developing this project. So we are still pretty early in the process. Other than having evaluated lots of sites, John has been here a long time looking at a lot of different places and settled on through this process the Stony Point site as

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being really kind of ideal for this project.

As we move through this process, we'll continue to do stakeholder, community outreach like this, stakeholder engagement. And by "stakeholder," I mean anybody who has a stake in the outcome of this project.

That's all of you. What we will do through this process is really kind of work towards balancing the environmental and social impacts with economic goals of this project. If we've done our job correctly, we will get through this process where we kind of met all those goals. We minimized the impacts environmentally and socially, we actually added benefit, we added value and in addition we made this a project that works.

I'm happy to say in this case we have a lot to work with. This is great technology. We are very excited. And again, as we get more into the process and more meetings and to the next presentation I think hopefully you will see some of the benefits that I've come to see as well.

With all that being said, the

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foundation for a successful project on our end is open and transparent communication. So you've already heard that a lot and you will continue to hear it through the evening. That's how it's going to be successful. It's going to be something that the community is proud of and that we would like to have.

So that's what you get from me. You call me. I'll tell you what I know. There is going to be a website. We will put the permit application and all that kind of stuff will be there for everybody to see and to talk about as we go through all this.

Again, with that being said, one thing we all need to keep in mind, we are still pretty early in this process. Especially in the design part. I think John's due diligence phase and the work that he's done in the options analysis and finding the site is pretty well developed. Now we go to the design phase. That could be a six-month, nine-month process. Say if this were a baseball game, right now when it comes to the design and permitting, we are probably in the

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top of the 2nd inning. So everybody still has lots of chances to throw pitches and lots of chances to get at bats.

As such, some of the impacts as we're quantifying, we are optimizing. We are trying to always get to that point. So just bear with us. We appreciate your patience as we go through this process.

Again, appreciate your patience and interests as we optimize the design and quantify the benefits. We really look forward to working with this community and answering your questions, receiving them on the cards and moving forward. Again, I assure you that I'll answer any questions that will come my way.

With that being said, I'll hand over the microphone to Mr. Chris Doherty who is the Vice-President with TRI or ThermoChem Recovery and he will talk to you about the fun part which is the process.

MR. DOHERTY: I will try to remember to speak into the mic the whole time. Hopefully I'm being heard.

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My name is Chris Doherty. And I actually was not nervous until I came here and looked out this way. So I hope that my excitement and passion for this project will trump the butterflies. And I want to thank John and Tom and the Town Board, the Planning Board, Mr. Smith for inviting me here.

I do want to say that TRI, and I'll explain what our company is and what our company does, but we are truly excited to be here and to be providing this technology to the proposed project.

We are very passionate about our technology. We are proud of it. It's a clean and green technology that all of the folks at the company are deeply passionate about. And although it may sound corny, we are passionate about it because we think it can positively change the world. And sometimes you have to apologize for corny statements, but I tend to make them anyway because we, this country is dealing with climate change. This world is dealing with climate change. Something has to change and

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more than that, many, many things have to change. Clean technologies that can convert energy from waste sources is one of those ways to address the global challenge of getting clean, cheap energy without damaging our one and only planet.

Also, this is not a prepared anecdote because I don't do those, I don't have those, but as I was getting ready and I saw the room starting to fill up, I was actually reminded of a painting by Norman Rockwell, probably my favorite painter. I'm a Massachusetts guy, so I plug Rockwell. It's the one where it's in a school and it's a bunch of folks who have come, there's the town leaders on one end and everyone sitting in chairs like that. You don't know what the issue is, you don't know what the topic is, but it's kind of a glance of the democratic process in the making where you come, you say your piece, you have to get approvals from this group and that group and this group and the other group. And that's what democracy is. That's where people come and listen, hear and stand

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up, and as my colleagues have said, this is just one manifestation of that. But we are as proud to be involved in that kind of process which is entirely appropriate with all the regulations and all the checks and balances and all the things that should be in place and are in place for a project like this, so we look at this as a very important part of the process and we are happy to be here.

I feel like I've been set up. I'm the only one that did slides. I hope it's okay, but to get across some of these issues, I wanted to have these. And of course, we can send these out as well. We can make copies. They will be on the website. I don't want people to feel they have to pay too close attention to the notes because these will be provided to you.

So as I mentioned, TRI -- it's probably worth mentioning, although TRI is a lot easier to say. I should point out what the TRI stands for. TRI is ThermoChem Recovery International. We are a Maryland based

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company, and again, even in our mission statement it's a bit unapologetic and corny. We were founded in 1996 on the basic idea that thoughtful, advanced technologies can improve the safety, efficiency and value of converting waste streams into valuable energy. So that's the raison d'etre of our company. It'll specifically be able to safely and reliably take and convert waste streams which there are a wide variety of waste streams, and we can talk about that, into something valuable for the community.

So we are a technology company. We have engineers and scientists and inventors and we develop technologies and then optimize them and commercialize them specifically to do what I mentioned which is to take high volume, tricky complex feedstocks that are either otherwise not used at all for energy or are converted in less efficient polluting ways historically. We will talk about that.

One of our goals in a nutshell is to tell you all or to start to tell you all what the process is, but also what the process

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isn't. We want to be both affirmative in saying here is what we do and who we are. But we've found that it's also worth defining us at this level and at other levels as what we are not. Taking those two things combined, what we do and who we are and then explicitly pointing out what we're not to try to avoid any misunderstandings or misperceptions, together we hope that will give you an understanding at this level of why we are a better way to convert these feedstocks.

The recovery is underlined. I should have said I'm here with a colleague of mine from TRI, Shawn Freitas. He may be available as well for questions or other things. He underlined that word. Now I should say why he underlined that. Because although the name is kind of clunky, what we are trying to do is recover the energy in a carbon and hydrogen that's in those waste materials, we're trying to recover that, and we use a thermochemical process. If we had gone through some kind of focus group, we never

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would have come up with such a clunky engineering kind of name, but that's our name and that's what we do.

I said TRI. We are almost twenty years old. We are neither a brand new entity that has just been created in someone's garage, nor are we one of the old kind of usual suspects in the energy industry. We think that's a good thing. It is what it is for the first point. But we think it's a good -- it fits because we have been around for long enough to really develop and implement and practice and improve our technology. So it's just not like a concept or something quite nascent. At the same time we are new enough and small enough to really embrace innovative, newer, fundamentally better approaches to older problems.

We started in 1996. Actually we were not originally a company that focused on what is the main feedstock of this proposed project, municipal solid waste. We didn't start there. Our company's genesis is actually in the pulp and paper industry which

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is a large global industry and it's what we presented to the pulp and paper industry was a way for the pulp and paper plants to convert one of their waste streams which is called black liquor, which some people may know it, but it's a fairly esoteric by-product of the pulp and paper process. Think of a black, tarry, viscous goop that has a lot of chemicals in it. Any pulp and paper mill needs to reclaim the energy, ThermoChem Recovery International, and then give the chemicals back. So that's the birth of our company was using our process for that. But, in addition to doing this cleaner and more efficient process for the very idiosyncratic product of black liquor, we also moved into waste streams writ large.

Perhaps the biggest and most well-known of all waste streams is municipal solid waste. It's the opposite of an esoteric idiosyncratic feedstock. It's highly abundant. It's very heterogenous and this planet needs to come up with much better ways of dealing with those materials than sending

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them off to a landfill and just turning a blind eye to them or converting them in old and messy inappropriate processes.

So in 2003 we commercialized our process on black liquor. In 2008 we constructed what is jargony, but it's this innovative process demonstration unit, think of it as a refinery with all the unit operations of a refinery like the one proposed here for Stony Point. So it's a full blown model of MSW material coming in and clean transportation fuels coming out. So we have been running that puppy since 2008 on a wide variety of feedstocks as we continue to learn and as we support clients and support projects. It's a very malleable refinery in order to test and verify and have quite literally waste streams and then analyze the waste streams.

Just one quick digression. We have been running that facility for several years now. All of the ash that comes out of that facility has been tested and it's a nonhazardous ash. Most of the material as is

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the whole raison d'etre is converted into usable energy and fuels. Unavoidably some amount of incoming material is going to be irreducible and is going to be in an ash form just like you would expect. All that ash that comes out is itself a product because, 1, it's not hazardous which is important to point out. Number 2, it can be used as a aggregate in cement or jersey barriers or you name it. The reason I make that tiny digression is that facility lets us not even test so much as run full bore on any type of configuration that is of interest for permitting or for analysis or evaluation or what have you.

In 2011 we in supporting of projects that had not MSW feedstock, but wood waste and agricultural waste feedstocks, we ran through all those traps, mimicked exactly what a larger size facility would have and then did all the testing. So the reason we point these particular points out of the time line is to just try get across what we think are meaningful milestones in our company's

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history. No, we didn't start in municipal solid waste, but the market has actually pulled us to that because of the size of the societal problem and the need to do something smarter, safer, better and cleaner with mountains of municipal solid waste in one form or another.

I think most of you would have a similar unappealing image in your head of what are the components of municipal solid waste? As I mentioned, municipal solid waste by its very nature is heterogeneous. It's going to change by location. It's going to change by season. It's going to change by any number of parameters, right, so it is the opposite of homogeneous predictable feedstock.

Okay, you got to start somewhere. What is municipal solid waste? For the most part we can break it up into three categories. I have good news and bad news. I found the pointer. Now I'm off and running here. I'm not sure it adds any value to you, but I feel better having it.

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Tom mentioned discarded material. So what are waste products? It's not an artificial distinction. Number 1, it's discarded, so it's waste because somebody has decided it's waste. Someone made the decision to throw something out, whether in the household garbage or in business garbage, or commercial and demolition garbage, it's been discarded. It's going to change. For the most part you are going to get -- you know what just occurred to me. This is a pie chart. That's kind of gross, John. This is, in fact, a pie chart. In this part of the pie chart is what we will call biomass. Organic. It might be called biogenic material. It's a whole host of stuff that is discarded. Food waste alone in this country is just a national shame of the amount of food that gets thrown out. Of course hand in glove with any effort like this is, of course, trying to throw out way less food and throw out way less of anything. The fact of the matter is right now across the country when you look at MSW, a significant portion

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of that is going to be food scraps, which is wet, putrescible food, yard waste, sludge, just basically a big gunky muck. Not unlike some of that black liquor that we mentioned. It's wet. It can be easily 50 to 60 percent water in there. That's a significant portion of what comes in on any typical given garbage truck. Down here you have a more orderly, but also a significant amount of recyclable materials; glass, cans, bottles, paper, cardboard. Also I'm not an expert on this area at all, but even in places that have pretty active recycling programs which are great and they should be encouraged, it's a pretty open secret that an awful lot of very recyclable material gets thrown into the "garbage" garbage. So that's why we want to try to include that. You try to get it out as early as possible, but the fact of the matter is a significant portion of trash, MSW garbage, has entirely recyclable material in it.

And the last bit, we just kind of called it garbage, it's kind of what you

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might expect. It's plastic. It's baggies. It's chips. You name it. A lot of plastic. There's a lot of low end plastic there.

So I mentioned that we were going to try to get across in this compressed, who we are and what we do, what we are not as well. Many of you may have very understandably an image in your head of what any process that's going to take garbage in and send out fuels or electricity, what they do. And it's very understandable of that perception, but some may have no perception, but I would expect that most would have some perception and that perception wouldn't necessarily be based on the most similar plants that exist right now. Here is one of the places where I waive and say here is one big difference between those and what we are proposing here in this project. We are not an incineration project or process. That's not putting lipstick on a pig and making some kind of nuance distinction and then trying to say this is the nuance distinction. We are not incineration. The first way we are not

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incineration is we can't take -- the process can't take glass and these plastics and cans. We can't take them. We don't want them. It's not what we're designed for. So big difference number 1 is this process doesn't take trash in the typical sense as a feedstock. The municipal solid waste is a precursor feedstock from which we have to pull the parts that would otherwise go to the landfill and decompose, that's what we want. That's our feedstock. So we recycle whatever has gotten through even from say a less energetic recycling campaign to a really good recycling campaign. Whatever amount of recycling materials that comes in that's still in the feedstock, job 1 is to take that out and recycle it for the dual reason of you can make money off of recyclables, and 2, you don't want that stuff in your process because you can't convert it. It's bad. The other part where it's important, we have this dramatic graphic to indicate at a glance that we don't take trash like that.

Now, I know in Baltimore where our

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company is based, right as you get into downtown Baltimore there's a historical trash to energy facility. It's run by a company called Wheelabrator. Wheelabrator is a known company that does trash to energy. And that's been there a long time. It's doing its business. But I sometimes feel like when people drive by on I-95, they very frequently see backed up dump trucks, seven, eight, nine, ten backed up dump trucks. Those dump trucks literally drive into the facility and they dump whatever is in there into like an open mouth volcano pit and it's like a furnace. That's why, and I hope I'm not overdoing it, but we are not that. We don't want to be that. We are fundamentally not that in a couple of key ways. Number 1, that's a very inefficient process. If you ever watch one of those, you will see what comes out the back is, you know, microwave ovens and garbage and sofas. All manner of things that are getting dumped into a fire pit. Some like apocalyptic scenario which creates mountains of ash, mountains and

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mountains of ash that is problematic. So 1, you get huge amounts of ash, and 2, that ash is problematic because it has been converted into that ash. So that's why we are taking pains to say we are not that. We can't do that. We don't want to do that. Yes, MSW trucks come in from which there is an elaborate thoughtful process that takes the stuff that would otherwise go to landfill, we dry it down to about 10 percent, we cut it up into little pieces so it looks like kind of a fluff. So it's very different on all levels from this Dante-esque scenario of incineration facility and we send it off to recycling. So that's big difference number 1. Hopefully what you will see and you will come back to why as a young company we draw from idealistic engineers and inventors from all over the world who want to be part of not the current problem, but the solution to all these things. So we dramatically put a black pie wedge over the recyclables because we don't take those. We recycle them.

Here's big difference number 2. All

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those processes that most of you may have understandably come in thinking, okay, I've heard that there may be a waste to fuels facility in Stony Point, I know how those work. What they do is bring it in, they burn it, they create a bunch of emissions, a bunch of smoke and they burn it in a boiler. Who knows. It's just big and messy and sloppy. Here's big difference number 2. That old way of doing things which I don't think is permitable anyway, is represented by this flaming match. It's the fire pit that I mentioned, the open mouth volcano into which any manner of things is done. Our process does not have that fire. It does not have that combustion. It doesn't use air and combust that material into another product. And this is relatively nuance, but it's kind of one of the game changers. Our process is a gasification process. What that means is we convert the incoming material that I briefly described as the stuff that would otherwise go to the landfill that has lots of good carbon in it, but that's not being used.

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We chemically convert that into a gas, but we do so in the absence of combustion and air which is represented here.

So when this gas, we call it smoke, when this gas is emitted, I'll get to this and show it hopefully more clearly. There's going to be an animation which hopefully will show this a lot better than I may be doing. When we create that gas, we capture it all. So that smoke, that synthesis gas is our product. So rather than being a by-product that's being spewed into the atmosphere, just hypothetically, something like that would never be approved or even proposed, but hypothetically rather than that scenario, we are capturing all of that gas because that now has the hydrogen and carbon that we need to make the clean fuels. Again, we have learned through experience that we want to make this distinction because it does -- it's a distinction from which many other positive attributes flow. It's not kind of just one for the sake of making one.

So we get back to -- here's a pretty

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good real world of what the material looks like. It's bags of garbage that need to go through the up front process. I should say the project works with front end entities who are quite expert in taking in all manner of municipal solid waste and making it exactly to the rather specific specification that I described. We take out certain things, you leave in other things, you dry it down to a certain level and you introduce it into the gasifier. So the folks who have done that, there are about 130 facilities in Europe that take garbage of one form or another and convert it into -- in their case they overwhelmingly go to electricity and they burn it or boil it through steam to run turbines to make electricity. They are not all making fuels, but it's a very well-known and established process that's quite reliable.

Through this process, we are taking the carbon that would otherwise be wasted and the material that would otherwise go to overflowing landfills and decompose be put

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under the ground and throw off methane. When they go to the landfill not only do you have to have landfill space, the decomposing material there creates copious amounts of methane. So rather than that happening, we put in our process and we do create the basic building blocks for the kind of energy products we have. So that's what this is meant to get across. And again, all of these will be handed out.

Another word on one of the big differences. We have our gasifier and it's shown in this graphic here where this says water, carbon, water. It's in here. It converts the material into this highly valuable smoke that we capture. All of it is contained in a closed system. That as I say, there's a picture at the end that will get this across more clearly, so we capture all that, not just for environmental reasons, but for the very reason that that is our product. That is the material that has all of the energy in it. So after we trap it here so you see what was started as carbon and water

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in the form of steam has now been converted into hydrogen, carbon monoxide in a very energy rich gas. The next thing we do, stage 2 of essentially a two-stage process, is we take that captured valuable smoke that has not been emitted into the atmosphere and we put it over a catalytic process. There are different ways to do this catalytic process. They have been around for 70, 80 and 90 years. Quite successful, quite proven. The one we use, we load up our reactor with a cobalt catalyst and our smoke over the cobalt catalyst results in the renewable diesel that is the focus of this particular project. It's quite an elegant system. I didn't invent it, but I feel like I can call it that. It's an elegant system that by its very nature is particularly good with these high volume complex feedstocks to create a clean end product.

Now, this is another slide that my colleague Shawn made. If you like it, I collaborated on it with him. If you think it's cheesy or misplaced, it was all him.

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The other big difference, the third big difference, there aren't ten, I'm going to get the hook here, the other big difference is this. Hopefully there is a little bit of a reveal in this. When we said earlier that we convert this material and we don't do it with combustion, we don't do it with an open fire pit with death and destruction, we don't do it with air, a reasonable question is, well, then how do you do it? How do you do it? How do you convert the trapped carbon and hydrogen? Well, the big reveal is we use steam. That's our secret ingredient. Our process is a steam reforming process. That's a type of gasification and it's a type that we developed originally for the pulp and paper industry, but it happens to have a host of positive knock on effects for MSW. In a nutshell, what those are, as we have indicated, this is about how hot it gets inside our vessel. 1,200 to 1,500 degrees F. That's not that hot as these things go. It's actually a pretty gentle process. It's because you are using steam. Think of it as

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a superheated steam bath which can't get up to the temperatures of an open pit fire. That's fine. But what it can do is it converts what we need converted into the form that we need it with steam without the highly polluting, highly problematic aspects of the open apocalyptic fire pit that has been used in the past. It also gets to a synthesis gas, a smoke that has got enough oomph in it to be converted to fuels. A lot of those older facilities can't make fuel. They can't make fuels because their process doesn't create a robust enough syngas. There's not enough calorific value. There's not enough oomph in it to turn it into fuel. So what they do is they either just stop at volume reduction, the historical products. Their raison d'etre is to take a hundred tons in and only have 20 tons of ash going out. Or they burn the gas in a boiler like a hundred year old technology and make steam to produce electricity in a very inefficient way. The reason they don't go to fuels is they can't. They just chemically can't. So with the

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steam reforming process we have all these positive advantages and they allow us in addition to being cleaner and more efficient, they allow us to have a synthesis gas that creates smoke that we can convert into fuels.

So those are the three big differences as we continue to thread who we are and what we do and don't do. So we are not burning trash like on any level, we are not burning trash. We are gasifying the material and we are capturing all the smoke. The way we are doing it, the way we are doing this is in a rather innovative steam reforming way. That is what frankly gives us -- it's what's allowed us to be fortunate enough working with other clients to capture or to win a rather large amount of support from the Department of Energy, Federal Department of Energy and the Department of Defense because in the former case they want to support American clean energy technologies and in the second case the Department of Defense wants to be able to make jet fuel and fuel for tactical vehicles that is made from

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domestically abundant feedstocks and not foreign or even domestic petroleum. So all of those knock on effects, all of those attributes have nicely in the last several years resulted in significant support from those agencies as well as from private entities, including New Planet Energy. So that image of the gimmicky lighter that sprouts water/steam is part of our secret sauce.

 This is giving away the ending. Just turn away. There's too much there to see. I'm going to start this animation again. It's short. Hopefully what this will show is some of what I've said in this animation representation of how the feedstock goes into our closed vessel is -- the moisture is almost flashed off almost instantly and carbon and hydrogen is reformed with steam with the absence of air, absence of combustion into the building blocks that we described. But in the walk through -- this is a picture of our vessel. This is a bit misleading. It would have a pipe on it. It

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wouldn't be open. So here we have is a steam reforming vessel, also sometimes called a gasifier, but that can be somewhat misleading. We have a bed drain at the bottom because no matter how hard you try lots of metals and things will still get through and you have to basically open the plug at the bottom and periodically drain out clinkers. So these tubes here are the heat input for the fluidized bed. So when you look at this, this is the vessel into which the biomethane, the MSW will ultimately come. The first thing you do, and this is actually kind of maybe big difference number 4 or modest difference 1A. We use a circulated fluidized bed. Our technology uses this fluidized bed so we fill up our vessel with some kind of benign bed medium like aluminum oxide, like sand really. Something that helps heat transfer from where you want it to come from and where you want it to go. The first thing you do is you fill up your vessel with your benign material. Then you put in the superheated steam, magic conversion

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method. You fire up your heat exchangers and then you get your bed up to temperature. Then you bring in your material which has been dried to 10 percent give or take. If it's 12 it's not a problem. If it's 8 it's better. And then you put it into the fluidized bed. Now in this kind of thermal fly wheel soupy goopy 1,500 degree bed you got all this mixing going on. You are converting your biomass, your MSW, you are converting it into the smoke that we said, you're capturing it here. Any then any solids that may have gotten in there, they just fall to the bed again. This is one animated way of essentially showing that the way that the steam is the process by which you can reliably and cleanly convert the usable energy in the form of hydrogen and carbon monoxide into the building blocks that lead to the fuel as encapsulated by H₂O plus carbon plus heat source, results in hydrogen and carbon monoxide which together is your energy gas. So that's the process in a nutshell.

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I have a few more. So what we have tried to focus on in this once over lightly is, of course, the proposed products for the Stony Point project. This kind of jar of moonshine looking like, that is what the diesel fuel exactly looks like which is kind of counter-intuitive really. It's a water clear substance that is the mid-distillate exactly as it comes out of the process. This here as it's labeled is paraffin wax. It's longer chain hydrocarbons that can either be used as wax which can be a lubricant, a base oil, or candle material or you can further crack that and turn it into more of this diesel. But just as a factual matter, the garbage comes in and these are the two main products that come out which can then be turned into all jet fuel or all diesel. That's a customization issue that can be determined. All of these things as you might expect, but here I am pointing it out, is that with the Department of Energy support and the Department of Defense support, all of these things have been vetted to the enth

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degree and verified by any number of third party engineers and independent engineers essentially confirming every aspect of what has been presented, albeit quickly here tonight.

 This is the facility that we have constructed and operated since 2008. I think one reason to show this, not because there's any particular -- it's kind of a convoluted hard to look at and say I see where this is, I see where that is. The reason we are putting it in is because this is the place where we have for thousands and thousands of hours turned very real not kind of cherry picked MSW material into the diesel and the wax and the jet fuel. And it also conveys in one image that it's all captured. The last thing literally we want to do is to have any of that converted material be pumped into the atmosphere because that, as I say, that's our product. So we take that and we convert it. And it goes from right to left, so this is in Hebrew. It goes from right to left. So the biomass comes in here, the MSW, garbage comes

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in here, it gets converted, it gets cleaned up. That's worth a quick mention or so. When we create that very valuable synthesis gas it needs to be cleaned. It needs to be cleaned in situ, in that facility right there and it is because that gas needs to be extremely pristine when you take it and you put it over these commercial tubes which is the second stage, the one that converts the gas into the transportation fuels. These are exactly the size they will be here in Stony Point. It's exactly what these are like. It's quite a -- it's very impressive what it does, but it's kind of a modest looking facility. It really is.

This is just to give you an idea, this is from our Canada project. We put this up. We were trying to look for pictures. When you think of it, once you put the reformer vessel into a building, you don't get as good a sense of what it's like. So the best time to take a photo is one of these reformer vessels is when it's on it's way to being placed into a building. That's why we took

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these particular shots. You saw the animation that had eight tubes. This has four tubes, but it's being hoisted into its housing at our facility up in Canada, up and running since 2003 naturally adhering to and surpassing all of the appropriately stringent Canadian requirements as you would expect. This is a OF1 mill. This is back in our pulp and paper days. This particular mill is a OF1 mill.

I think I'm almost over. I hope I haven't gone on too long. This is also kind representing the change from a process like we are beginning now and Tom mentioned we are in the top of the 2nd give or take as we design the particular specific process. This is a manifestation of another one of our projects which once upon a time was a highly thought out cad drawing and then becomes a facility that you go to and that actually is under construction now that converts municipal solid waste, post recycling, feedstock into jet fuel. Those folks are going all the way to jet fuel in the Nevada

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desert.

Okay, last slide. So TRI, we are implementing our clean technology for a sustainable environment. That's what drives us. That's what helps us get the best and brightest in the company. We want to be a part of the next hundred years and improve the health of our planet. So we are quite excited about our technologies and we are really excited to be part of this project.

And I had this and it is literally -- I've never been so cold in my life as I have been in the last couple days here. These guys talk about the Vero Beach project. It's kind of a sore spot. This is the Christmas card, the holiday card that TRI sent out. We don't take ourselves too seriously here. For those who can't see it, it's hilarious. It's a snowman without the coal eyeballs saying he or she is trying to reduce his dependence of fossil fuels. For those lawyers among you, we did pay the royalty for our card. But I couldn't get the cartoon stock off there. We have a royalty agreement with the artist.

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So that's us. Very excited. Top of the 2nd. And I think I've used up my time and now I will turn it back.

CHAIRMAN GUBITOSA: What we are going to do now, there's index cards available that we will distribute. We will take a 10, 15 minute break. Write down your questions. When we come back, we will read out the questions for New Planet. Unfortunately we have this building until 10:00 and we would like to wrap up by 9:45 so the staff can get the building ready for the kids in the morning.

Everything you see tonight, the slides, the recordings, once we get the minutes it will be posted on our website. If you miss something and you didn't get it, we are going to get it on our website. As soon as we get it we will get a link to New Planet. We are going to get the presentation. We are going to get questions. Everything will be posted. So what we'll do right now -- and just a reminder, the questions will be on the presentation tonight and there is going to be

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future meetings for other questions. We will take a 10, 15 minute break. Around 8:30 I'll call you back.

(SHORT RECESS TAKEN)

CHAIRMAN GUBITOSA: Thank you.

Everyone, please have a seat. All right. Everyone, thank you. Just, remember we have to follow the cafeteria rules. Like I said before the break, a lot of the questions that we are going to ask that we received from the public, we have to go based on the presentation. There's a lot of SEQRA questions that came through and safety and environmental questions. Those questions we are going to leave there to forward to New Planet because the DEC is going to be answering a lot of those. They are the ones that are going to be doing the process. They are the ones along with the town will be looking at all those details. Those questions with SEQRA, related to SEQRA, related to safety, you know, if we don't get

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to it tonight, it will be given to New Planet and it will be answered because the DEC will be looking at that.

Since we have Chris here tonight and a lot of the New Planet guys, there's questions that came through with the presentation, with the technology and the process. That's what we are going to basically focus on with the questions.

John, if you want to come up. I have some here. For New Planet, one the questions came through is what other U.S. firms process and utilized the specific gasification technology?

MR. DOHERTY: In addition to the pulp and paper implementations, we are working with a company called Fulcrum Bioenergy which is implementing this technology in Nevada. There was a photo of the facility there. They have, I guess, broadly a similar mandate of taking otherwise unused undervalued waste streams and converting them into renewable fuels. We also have energy projects, and by energy, I mean electricity. Oftentimes

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energy as opposed to fuels. Electricity as opposed to fuels. With entities in Central America and South America where they have as -- perhaps as pronounced in certain places as pronounced a municipal solid waste issue as we do here. There's a variety of folks, one company is Replanter that we work with and some of the same -- some of the same engineering procurement and construction firms. There was a brief mention of Abengoa Bioenergy. If you folks are familiar, it's a Spanish based company that I think is the second largest producer of ethanol in the world in addition to having other energy projects and we have several projects with Abengoa as well.

CHAIRMAN GUBITOSA: The follow-up on that would be what percentage of MSW will be from outside New York State?

THE DOHERTY: Zero.

MR. CRUIKSHANK: Zero.

CHAIRMAN GUBITOSA: Another question is where is there a plant in the U.S. that produces diesel and how many tons of MSW does

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it process a day?

MR. DOHERTY: Repeat that question?

CHAIRMAN GUBITOSA: Where is there a plant in the U.S. that produces diesel and how many tons of MSW does it process a day?

MR. DOHERTY: The Nevada facility takes in a thousand tons a day of MSW and the facility in North Carolina, it's a smaller unit, essentially eight wet tons, four dry tons per day.

CHAIRMAN GUBITOSA: Another question. Besides the synthetic diesel, what other by-products will be produced and/or stored on the site?

MR. FREITAS: My name is Shawn Freitas. I'm a senior process chemist for TRI. Aside from the Fischer-Tropsh liquids, the diesel product, that fuel product, there's going to be a small amount of emissions from the boilers that are used to make the steam. That's not so dissimilar from the furnaces and the boilers that are used to heat this building. We use natural gas and water to make steam to heat our

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reactor like Chris just talked about. That will make a little bit of carbon dioxide and a little bit of steam just like the furnace and the boiler in this building does.

There's also going to be a little bit of wastewater generated from the gas clean up system depending on the project demand.

Either that wastewater is recycled on site and reused or if there is local municipal capacity it can be accepted there. As Chris mentioned, there's a function of steam reforming. The gas tends to be much, much cleaner and easier to clean. So the things that we're removing from it are far, far less toxic than what you typically would be exposed to with incinerator or combustion facilities.

CHAIRMAN GUBITOSA: The next one is probably a two part. Where does the heat come from for the process and what fuel is used to get the gasification process going?

MR. FREITAS: All right. So the heat comes from two places. You superheat steam because you have to get it up to 1,200 to

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1,500 degrees F before it becomes a reactive steam that can be used to thermally disassemble the trash. So part of that heat comes from superheating the water so like a steam generator. That's not hot enough. Your steam that comes out of your boiler is not hot enough. So in that animation that Chris showed, you saw something that was described as a heat exchanger sticking in and out of the reactor. Those heat exchangers are something incredibly -- I could talk about this for hours. This is my chance, so I'm going to take it. There's something called a pulse combuster. There are two parts of that reactor that you saw that are world firsts for us that make out thermal conversion better than I think just about anybody else's out there. The first are those tubes you saw through the reactor, those heat exchangers. They are called pulse combusters. And they have the benefit of being some of the most efficient combustion driven heat exchangers on earth. They do something very, very unique with their

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combustion that allows them to push heat into the reactor with an efficiency that's unmatched by any other process out there. The other part about it that Chris didn't get into too much, those fluidized beds that we use are some of the deepest in the world. We not only pioneered pulse combuster heat exchanger technology and proven it at a commercial scale and succeeded hugely, but we have also pioneered these deep, deep fluidized beds. They are thirty plus feet deep. That is phenomenally deep. It results in a situation that allows you to use a lot less energy to heat the reactor than you would traditionally use for something that like in your normal fluidized bed combusters that have like two or three feet of fluidized bed. So we have thirty feet. It allows us to not only use the sufficient heat exchanger, but also use less energy than we would have otherwise to do a really good thermal conversion, good mixing, really clean gasification.

CHAIRMAN GUBITOSA: John.

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MR. CRUIKSHANK: It says you show the pulp and paper plant in the presentation. Do you have a full size working plant handling MSW? Is the Florida plant the same as the proposed one? The Florida plant is doing 500 tons a day of green waste. We are looking at 4,000 tons a day of municipal solid waste here. Canada is 500 tons a day.

CHAIRMAN GUBITOSA: Next question was what happens to the small amounts of discharge to be thrown away?

MR. DOHERTY: The question is what happens to the small amount of discharge that gets thrown away. When I hear that question, I think of the ash that's left over. So there's going to be certain amount of ash when any feedstock that comes in that is irreducible, nonconvertible material that can and does vary by what you put in. So our ash that we generate which we definitely, you know, there's ash left over, is as you say 5 percent. Again, it's not a dodge. It depends. If you bring in a certain amount of feedstock, that can have a different effect

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on your ash. Two points, our ash is relatively small percentage, single digit percentages. And it's nonhazardous which is an important aspect. Depending on your process, you can actually create a hazardous ash that has to be disposed of in an appropriate manner. If you have nonhazardous ash, say some single digit percentage, that can be used in concrete, that can be used in aggregate, it can be land applied. There is some carbon left in there that hasn't been converted, so that's what happens to the ash. Now, I kind of took a swipe at the incineration because the reason why incineration historically has much, much higher levels of ash is twofold. One, they take in a very different and broader range of materials, but then they pulverize or they essentially convert at very, very high temperatures which results in heaps and heaps of ash that can be hazardous.

CHAIRMAN GUBITOSA: Thank you. The separation of the MSW, the recyclables, etcetera, is this done at the same facility

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in Stony Point?

MR. CRUIKSHANK: Yes, it is.

CHAIRMAN GUBITOSA: We might have answered this. Where does the power for the steam come from?

MR. FREITAS: That's literally just a steam boiler. That's the kind of equipment that is used to heat your hospitals and schools. It's often heated with electricity. It can be heated with natural gas. You just buy regular commodity power and fire a steam boiler.

CHAIRMAN GUBITOSA: Next question was can you share a ballpark project cost? I think we did that in the beginning.

MR. CRUIKSHANK: Ballpark project cost is nearly \$600 million.

MR. DOHERTY: Someone was waving and I couldn't interpret the hand gesture. I'm glad that they waved. Shawn's answer about burning natural gas to provide heat that is used in the process is certainly an accurate one. It's also entirely possible and we have done it, that we can skive off some of our

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own internally generated syngas/smoke and use that as a fuel to create the heat. So that's as I say, it's more a question of what exact configuration you want to go with? Just as a practical matter, you can either go with natural gas, you know, burning natural gas or you can -- once you start up, you have to start with something. So you need a pilot light at first. Once you get up and going you can then take your just created smoke/syngas and use that as a fuel too. It can be either or.

CHAIRMAN GUBITOSA: Another question is how many times have you pitched this project and what were the objections to those who declined to home this plant or house this plant?

MR. CRUIKSHANK: I'm not sure what you mean by how many times we pitched it other than we have been in New York exploring this as a possibility for more than a year and a half. So I guess we pitched it a number of times. We've really come in and explored the environment to see if this is something that

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might be accepted by the community. And what was the other?

CHAIRMAN GUBITOSA: And what were the objections to those who declined to house the plant?

MR. CRUIKSHANK: With respect to anybody declining to house us, out of probably thirty potential sites, there was one. It was in the area -- I'm not sure if it's a city or town called Corinth up north and they had a bad experience with a previous facility that they just didn't want this in the neighborhood any longer. Other than that, we have not had any neighborhoods say we're not interested. We just for a number of variables this particular site proved to be ideal for us and we hope to work that through with you and move ahead.

CHAIRMAN GUBITOSA: Another question, two part. How do you load the sand in the process and dispose of it?

MR. DOHERTY: How does the bed material get into the vessel in the first place and how does it get replaced?

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CHAIRMAN GUBITOSA: Yeah. How do you dispose of it?

MR. DOHERTY: Actually in some respects the animation is kind of representational. In this one it's dumped in. It's dumped in the bed from the top. The aluminum oxide is like a sand and a small amount per year will escape or attrit. It's pretty small. It's a single digit percentage of that bed material will attrit and that just gets replaced by adding back X percent, again, single digits per year into the bed. I say it's like sand. It really is. When it does come out, if it gets caught up in the ash, it's like little particles of sand.

CHAIRMAN GUBITOSA: The second part is how do you cool the system? I don't know if we talked about that.

MR. FREITAS: As a highly integrated small biorefinery, I know that what we just described to you sounds big, but compared to a monster petro-chem refinery, we are tiny. In order to make that work we have to be incredibly, incredibly efficient and produce

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as little waste as possible. Heat is one of those things. So we recover heat from our exhaust and any place we can in the process that's hot enough in something called heat recovery steam generators. So those are all over the place. The only other part of the process that's cooled other than places that we are recovering waste heat are the Fischer-Tropsh reactors and they are cooled with steam. So steam is put into the reactor, that steam becomes even hotter as bonds are formed and molecules are made. That hot steam then goes through a HRSG and another heat exchanger and it's sometimes recycled, sometimes fresh makeup is put in. In general, there's not all that much cooling. We are working hard to make it hot to drive the conversion. There's a little bit of -- there's certainly some cooling that happens in the gas clean up. But again, the vast majority of the heat removed in the process comes from those HRSG's and the FT reactor. Actually I'm going to segue into something. It wasn't totally mentioned in

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Chris' decs, but I wanted to say to all of you, our fuel making process is a lot like making plastic. It's not -- this isn't a new fangled Star Wars fuel process. What we're doing is we're polymerizing carbon monoxide together to make fuel molecules. So it's not special effects. The world has been doing Fischer-Tropsh for, I think, a couple hundred years now. It's been awhile. The world is really, really good at it. It really is just a polymerization reaction, so it's not special or untested. It's just a different way of using polymerization to make fuels instead of plastics using gas.

CHAIRMAN GUBITOSA: Another question. What is the feedstock capacity of the proposed plant in tons per day?

MR. CRUIKSHANK: The feedstock capacity tons per day is 4,000 tons per day. Our assumptions are based on let's assume 4,000 tons coming in. We are assuming that 50 percent of that gross weight is going to be consisting of recyclables, moisture and things like rocks and dirt and things like

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that. We really are seeking to process 2,000 tons a day and generate 38 million gallons a year of renewable diesel.

CHAIRMAN GUBITOSA: What is the production rate of diesel in barrels per day or gallons per year?

MR. DOHERTY: I can do this. It works out to be 2,260 barrels a day.

CHAIRMAN GUBITOSA: 2,260?

MR. DOHERTY: 2,260 barrels a day, give or take.

CHAIRMAN GUBITOSA: I guess this goes back to feedstock. Does it include biosolids? I guess they have sewage sludge.

MR. CRUIKSHANK: Yes, it can include biosolids like sewage sludge. We would want to dry those out. The material itself can be dried and processed.

CHAIRMAN GUBITOSA: Another question is what is the -- we might have answered this. What is the basic difference between the Vero Beach and Stony Point technology?

MR. CRUIKSHANK: They are two distinctly different technologies. While

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both are gasification, the TRI technology is a more efficient and much more attractive technology. The Vero Beach process is agricultural waste into ethanol. This process is municipal solid waste into electricity and renewable diesel.

CHAIRMAN GUBITOSA: If the steam reformers (indiscernible) clean ash, why would there be a need to contract to transport hazardous materials to a special site in Lewistown, New York?

MR. CRUIKSHANK: I'm not sure I understand the question because we have no intention of -- no discussion thus far into shipping hazardous waste anywhere. The ash that comes out is to be considered a clean ash and is going to be utilized by concrete and cement companies as a blend and strengthener for that material.

CHAIRMAN GUBITOSA: Next question is the process used in the conversion of a pile MSW into the gardens and parks you want is not clear. Where does the separation occur? On site? I think we answered the other.

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Where does the unwanted material of the MSW go?

MR. CRUIKSHANK: At this time everything will be done on site. The MSW will come in, it will be source separated. Once the recyclables are separated, they will be sent to recyclers. If I understood correctly, the residual products, the organics and such will be utilized, will be dried and then utilized in the process.

CHAIRMAN GUBITOSA: The other question was I think a few people in the beginning might have missed the introduction. If you could just introduce everyone who did the presentations where a lot of people missed that in the beginning. If you can just go through that.

MR. CRUIKSHANK: My name is John Cruikshank with New Planet Energy. We have Chris Dorothy with TRI. New Planet Energy CEO is Gary Smith. Thomas Yonge has been with us, he's with Golder Associates, Tom Yonge.

CHAIRMAN GUBITOSA: Thank you, John.

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Another question was where does the water come from for the process for the steam conversion?

MR. CRUIKSHANK: If I understand the question correctly, a great deal of -- a large volume of the water we are looking for, we are in the process of -- we've been discussing it with the town and we can utilize post-treatment water for that otherwise known as gray or nonpotable water.

CHAIRMAN GUBITOSA: I guess one other question -- another question, what does the word cleaned mean?

MR. DOHERTY: What does the word cleaned mean?

CHAIRMAN GUBITOSA: In the process.

MR. DOHERTY: In the process, sure. I think it probably means different things at different times. I do think the first thing I thought of and want to point out is when we create the syngas from the municipal solid waste, the syngas, the smoke needs to be cleaned. It needs to be cleaned to a very, very high degree because that gas is then

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going to be put over the Fischer-Tropsh catalyst which is a remarkable substance, but which is very intolerant of any contaminants. So the syngas when it's first created has a lot of cats and dogs in there as far as different contaminants. If those contaminants were to get through to the catalyst, it would directly and negatively affect the catalyst's ability to make a transportation fuel. So the best image we showed you was of the plant in North Carolina where the middle of the facility, the bulk of that was gas clean up, so when we say the syngas is cleaned, we are saying the syngas created from the incoming material, although primarily composed of carbon and hydrogen, carbon monoxide and hydrogen, it also has trace elements of other materials, contaminants which we cannot let through so we have a system of scrubbers and guards and other methods to trap to the parts per billion that syngas. So other times when we talk about a clean technology, kind a more colloquially, I think of that as clean

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meaning kind of at a minimum best available technology and one that reduces greenhouse gas emissions. On the greenhouse gas emissions issue, it's probably worth pointing out that in some of the other projects that we have been involved in, the price of admission for those projects to get the government support is to have a significant reduction in greenhouse gas emissions, so you have to show through the life cycle analysis that Tom Yonge described that your process is clean, which admittedly can be kind of a fuzzy term, but you have to show that it results in a significant reduction in the amount of greenhouse gas going into the atmosphere. Those types of models shown, and by significant we're talking 75 to 80 percent reductions in the standard greenhouse gas emissions. So that's a twofold answer. An attempted twofold answer. Number 1, we clean that synthesis gas to a remarkable degree not just because we think it's the right thing, but also because as a practical matter the catalyst can't tolerate any levels of

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contaminants. And 2, in order to be in this sector, you have to show with data significant reductions in greenhouse gases to get in. John reminded me that some of us may have used the term clean ash. That is an attempt to get across this idea that not all ash is created equal and if someone says there's a lot of ash, it doesn't ever sound good, but there's ash that's loaded with horrible materials and it's hazardous and it's awful and it's a function of the process that created it. It can be awful. And there's ash that is really kind of a benign resulting amount that no matter what your process is can't be converted and if it's not hazardous which you determine through testing, it can be used as a material. You get up to certain levels, yes, you can land apply it, from a volume reduction point of view you are already significantly reducing volume of MSW in and ash out, forgetting about the fuels and the electricity. At the same time you still want to use every little bit that you can. That's why as a function

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of this ash being clean ash and being non-hazardous you can do a lot of different stuff with it.

CHAIRMAN GUBITOSA: Thank you, Chris. Just like I said before, a lot of cards that I read tonight were on the process. A lot of the cards that had SEQRA questions, safety questions, that's questions that the DEC is going to go through. They didn't really want us to answer a lot of those questions because they are still gathering the information. Those questions we are forwarding over to New Planet. They will be answered. I didn't get -- just to give an update from the Town Board or the Planning Board, I didn't get the index cards if you wanted to ask something or just wait. I'll throw that opportunity out there.

SPEAKER FROM THE FLOOR: Is this a twenty-four hour operation?

CHAIRMAN GUBITOSA: Hold on. What we are going to do, the process, I think -- (interrupted)

MR. DOHERTY: The conversion process

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is definitely a twenty-four hour a day process. As far as what you might call the front end conversion of the incoming MSW into the usable feedstock, that can either be done -- that's typically done in shorter shifts. It's important that the process stays a twenty-four hour process, but that's not to say that every aspect of the plant is a twenty-four hour process. Again, there are different ways to approach it as you would expect, but I think the closest thing to a typical one is to have -- is to always have the process going twenty-four hours because it's a real -- there's significant advantages of staying up and warm once you're up and warm. But there can be shifts. Like normal shifts for other aspects of the work which can be, you know, done over five days and not seven.

CHAIRMAN GUBITOSA: Like I said in the beginning, tonight was an informational meeting to educate you guys, the Town Board and Planning Board. Unlike a public hearing where we have questions from the audience, we

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took them in forms of index cards. As the process goes forward and there are more meetings and public hearings, this is when you will have the opportunity to ask questions, stand up and ask questions. As far as tonight, this is an informational meeting.

So what we will do is to wrap up tonight, everything that is discussed tonight will be on the website. A link to their presentation. A link to the website. Links to any other information that we will get we are going to put on the website. We are right now working with our web administrator to update our website. A lot of this stuff will be found on our planning page. We are updating things. We will put in links. The one thing I want to ask everyone, if you have a question, you can call, you can ask the town, you can ask one of the officials. That's what we are here for. We don't want the hearsay I heard from this person, from this person. Just ask us. That's what we are here for. We are working with the DEC.

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They will have a meeting.

What I'll do now before I close, Geoff is going to just give a little wrap. After Geoff is done I'll give some more information before we close.

SUPERVISOR FINN: I just wanted to make a few comments and more importantly thank everyone. We have to thank, of course, our school board for allowing us use of this room. I know Ileana Eckert is here in the back. Ileana, are you still here? Ileana has been a great help getting this room. We have to thank the staff here at the Farley School. They did a great job setting up chairs and everything else. We were in here this afternoon helping them and they did a wonderful job again. Of course our presenters here tonight. They did a wonderful job here tonight. But most importantly we have to thank you. We have to thank you for coming out, for caring about your community. Coming out and listening and being respectful here tonight. This was wonderful. We really, really appreciate it.

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PROCEEDINGS

We thank the Town Board of course and of course our Planning Board as well.

As Tom just said, there's going to be many more opportunities for the public to be involved in this. This is something that is going to be out here. This is not something that we're going to make decisions. It's something that you are going to make decisions with us. You are going to work alongside of us. We are learning along with you. As I said earlier in this process, we are not scientists or anything else up here as board members. We are learning as we go along. I can assure you many of us are here tonight, we want to hear what's going on, but we are scared. We are being taxed out of our homes. It's the God's honest truth. We are being taxed out of our homes and we want to make sure that we are keeping an open mind and listening to a possibility of a plant coming here. There's great tax benefits to this. I'm not going to throw out numbers here, but that's what this is about. This is about tax ratables. We understand that. Let

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PROCEEDINGS

me assure you this. Mark my word, we will not bring something in here that we think is going to hurt, jeopardize the safety and health of our residents. That's not what we do. We are elected to stand up for the people of our community. That's what we're going to do. That's what the Planning Board is going to do. We know that the DEC is going to do the same exact thing. We are very confident that the presenters here have given us an early presentation of what this is about. As the process goes along we are all going to learn exactly how this works and hopefully in the end we will all benefit with jobs and a great tax ratable.

So I really want to thank you for coming out tonight. We really, really appreciate it and I'm going to turn it back over to Tom.

CHAIRMAN GUBITOSA: Just to say it again, our Planning Board meeting is the fourth Thursday of the month. Our Planning Board meeting and minutes are on the website. So if New Planet is going to be on our

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PROCEEDINGS

agenda, it will be publicized on our website. Everything is there. We are going to have links. Right now we have links to presentations that New Planet had done. We have a SEQRA document up there. If you are not familiar with the process, we have documents on the website that show you exactly what goes on in the process.

Like Geoff said, I want to thank you all for coming out, being respectful for the presentation, letting them continue. Thank you to the school and to the staff. I know they want to get us out of here so they can clean up for tomorrow. Thank you.

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THE FOREGOING IS CERTIFIED to be a true
and correct transcription of the original
stenographic minutes to the best of my
ability.

X Patrick DeGiorgio



PATRICK M. DEGIORGIO