



NY - GEO 2024

APRIL 8-9 | ALBANY NY



OPENING SESSION

Welcome: John Ciovacco, [Conference Co-Chair / NY-GEO](#)
Christine Hoffer, [Executive Director / NY-GEO](#)
Jens Ponikau, [President, NY-GEO / NY-GEO](#)

Legislative Update: Senator Pete Harkcham,
[Chairman of Committee on Environmental Conservation, 40th Senate District](#)

Introduction: Donovan Gordon, Director, Community Thermal Networks / [NYSERDA](#)

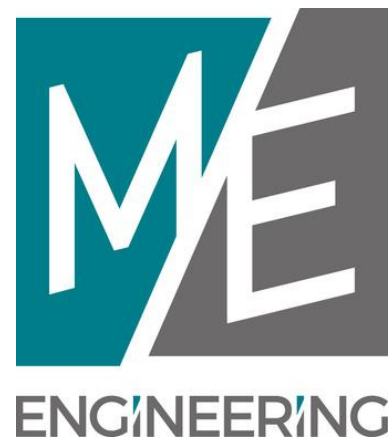
Morning Keynote: Rory Christian, Chair / [New York State Public Service Commission](#)



NY-GEO 2024 SPONSORS



NYSERDA





NY - G E O 2 0 2 4

EXHIBITORS



SPONSOR EXHIBITORS

NYSERDA

Brightcore Energy

Celsius Energy

CHA Consulting Inc.

Climate Control Group

Con Edison

CORECHEM Inc.

Credit Human

Eijkelkamp North America

Enertech Global

Groundheat Solar Wind

ME Engineering

NYS Laborers Organizing Fund

ROBCO

Trane Technologies

Versaprofiles

WaterFurnace International

EXHIBITORS

Air & Water Source

ACES-Energy

Aztech Geothermal

Centennial Plastics, Inc.

CETCO

Dandelion Energy

East West Drilling

Energy Catalyst Technologies

Ewbank Geo Testing

F.W. Webb

Geo-Flo Corporation

Geo-Hydro Supply

Geothermal Drilling Solutions LLC

GTD Group

HIGHMARK| Building Efficiency

ICF

IGSHPA/GeoExchange

LaBella Associates

Morris Industries

National Compressed Air Canada Ltd

National Grid

NYS Dept. of Public Service

Phoenix Energy Supply

RJ Murray

Rototec USA

Stark Tech

The Driller Podcast

UA Local 7 Plumbers/Steamfitters

Waterless Geothermal

*Thank
You!*



NY - GEO 2024

APRIL 8-9 | ALBANY NY



LEGISLATIVE UPDATE



Senator Pete Harkcham

Chairman of Committee on Environmental Conservation

NYS 40th Senate District

Last Year:

Cooling Tower and Heating Plant operating at the same time



Jens Ponikau, Board President NY-GEO

Zero Place, New Paltz NY

- 46 Residential Apts (55,780 sqf)



*Jens Ponikau,
Board President NY-GEO*

Average Energy Usage per Apt

(inclusive of all space conditioning and central DHW)

- Measured Results:
 - • 1-Bdrm Apts = 3,744 kWh/Yr (or 312 kWh/Mo)
 - • 2-Bdrm Apts = 5,096 kWh/Yr (or 424 kWh/Mo)
- Average NYS apartment 599 kWh/Mo without electrification (fossil fuel for DHW and space heating)



ZeroPlace Load Application New Paltz NY

- 46 Apartment Units
 - Non Geo Load application 1,000 Kw
 - Geo Load application 263 Kw +Common 80 Kw = Total 343 Kw
- Measured Peak:
 - Summer 71.26 Kw (07/19/2022, 99 degree F)
 - Winter 65.41 KW 02/04/2023, -6 degree F)





NY - GEO 2024

APRIL 8-9 | ALBANY NY



NYSERDA GEOTHERMAL UPDATE



Donovan Gordon

Director, Community Thermal Networks

NYSERDA



NY-Geo Albany Conference 2024

NYSERDA Geothermal Update

Donovan Gordon
Director, Community Thermal Networks

April 9, 2024

Happy 10th Anniversary NY-GEO



NYS Commitment to Developing the Geothermal Industry



- **Governor Hocu** is steadfast in her commitment to fighting climate change.
 - She’s working with the legislature to pass nation leading laws to advance clean energy.
 - She’s directed state agencies and authorities to develop policies, regulations, and programs to achieve the states aggressive GHG reduction goals
 - Primarily PSC, DEC, and NYPA, and NYSERDA
 - Stakeholder Engagement with NY-GEO and others

Laws Benefiting the Geothermal Industry

- **Climate Leadership and Community Protection Act (Climate Act)**
 - Established GHG reduction goals (40/30 & 85/50)
 - 35-40% of benefits from clean energy investments must go to disadvantaged communities
 - 1/3 of GHG in NY comes from building heating & cooling systems
 - Need to decarbonize building HVAC systems
- **NYS Geothermal Tax Credit**
 - 25% State Tax Credit Capped at \$5,000
- **Utility Thermal Energy Networks and Jobs Act (UTENJA)**
 - Allowing utilities to build, own, and operate Thermal Energy Networks
 - The 7 investor-owned utilities have submitted 13 pilot project proposals for DPS approval
 - Promotes development of TENs and provide jobs to transitioning utility workers
- **Advance Building Codes, Appliance and Equipment Efficiency Standards Act of 2022**
 - Establishes appliance and equipment efficiency standards for products that are sold, rented, leased, and installed in NY
- **2023 New York State Budget Bill**
 - NYPA conduct TENs feasibility studies for 15 of the highest GHG emitting State facilities
- **Geothermal Borehole Bill**
 - Exempts certain geothermal borehole depths beyond 500 FT from certain requirements
- **Local Law 97**
 - Establishes carbon emission limits for NYC's building over 25k square feet

Geothermal Incentives

- **Clean Energy Fund Established in 2015**
 - \$5 Billion Fund over 10 years
- **NYSERDA Geothermal Incentives**
 - Launched and Administered “Ground Source Heat Pump Incentive Program (2017-2020)”
- **NYS Clean Heat Incentive Program**
 - Utility administered Heat Pump Incentive Program (2020-present)
- **PON 4614 “Community Heat Pump Systems” Pilot Program**
 - Launched in 2021 and supported feasibility studies, Detail Engineering Design, & Construction of TENs
 - Provided funding for the two largest multifamily residential geothermal projects in NY (Coney Island & 1 Java)
 - Primary thermal source & sink for most of the projects is geothermal

Geothermal Market Development

- **Address Barriers to Geothermal Sales**
 - High first cost
 - Lack of consumer awareness
 - Lack of a trained workforce
- **Consortium Agreement with NY-GEO**
 - Build membership and revenue to offer more robust services
- **Consumer Awareness & Marketing**
 - Targeted geothermal advertising
 - Co-op advertising support
- **Workforce Development**
 - Support salaries for Interns, apprentices, and OJT for Drillers & Driller Helpers
 - Group looking to create a Center of Excellence for geothermal driller training
- **Geothermal Supply Chain Development:**
 - Conducted round table discussions with geothermal contractors, HP manufacturers, drillers, drill rig manufacturers, Pipe and Grout manufacturers
 - Common response was (Increase demand and Train the workforce)
 - Need to achieve geothermal cost compression and make systems more affordable

Next Steps

- **New Team Name and Focus**
 - *Community Thermal Networks*
- **Launch New PON by Q3 2024**
 - Focus on minimizing grid impact (building & HP efficiency)
 - Leverage with other technologies with Geo to increase the COP to use less electricity
 - Develop pipeline of engineering designed / shovel ready TEN projects to bid for construction
 - Explore Different Business Models and Financing & Ownership Structures
 - (P3, municipality, private, utility)
 - Explore the best opportunities for TENs on Campuses
 - (colleges, multifamily, hospitals, office)
- **Develop projects in Disadvantaged Communities and LMI:**
 - 35-40% of benefits from clean energy investments must go to DACs
 - Train residents in DACs for good paying jobs

Geothermal TV Spot



<https://www.youtube.com/watch?v=ySMXLgzbJgo&list=PLNs7tyvrkK1VbANvBwpkPFSIkEL8a1cfb>



NY - GEO 2024

APRIL 8-9 | ALBANY NY



MORNING KEYNOTE



Rory Christian
Chair

New York State
Public Service Commission



NY-GEO 2024 SPONSORS



NYSERDA

