



The Market for a Thermal REC

2019 AGA/EPA
Renewable Natural Gas Workshop

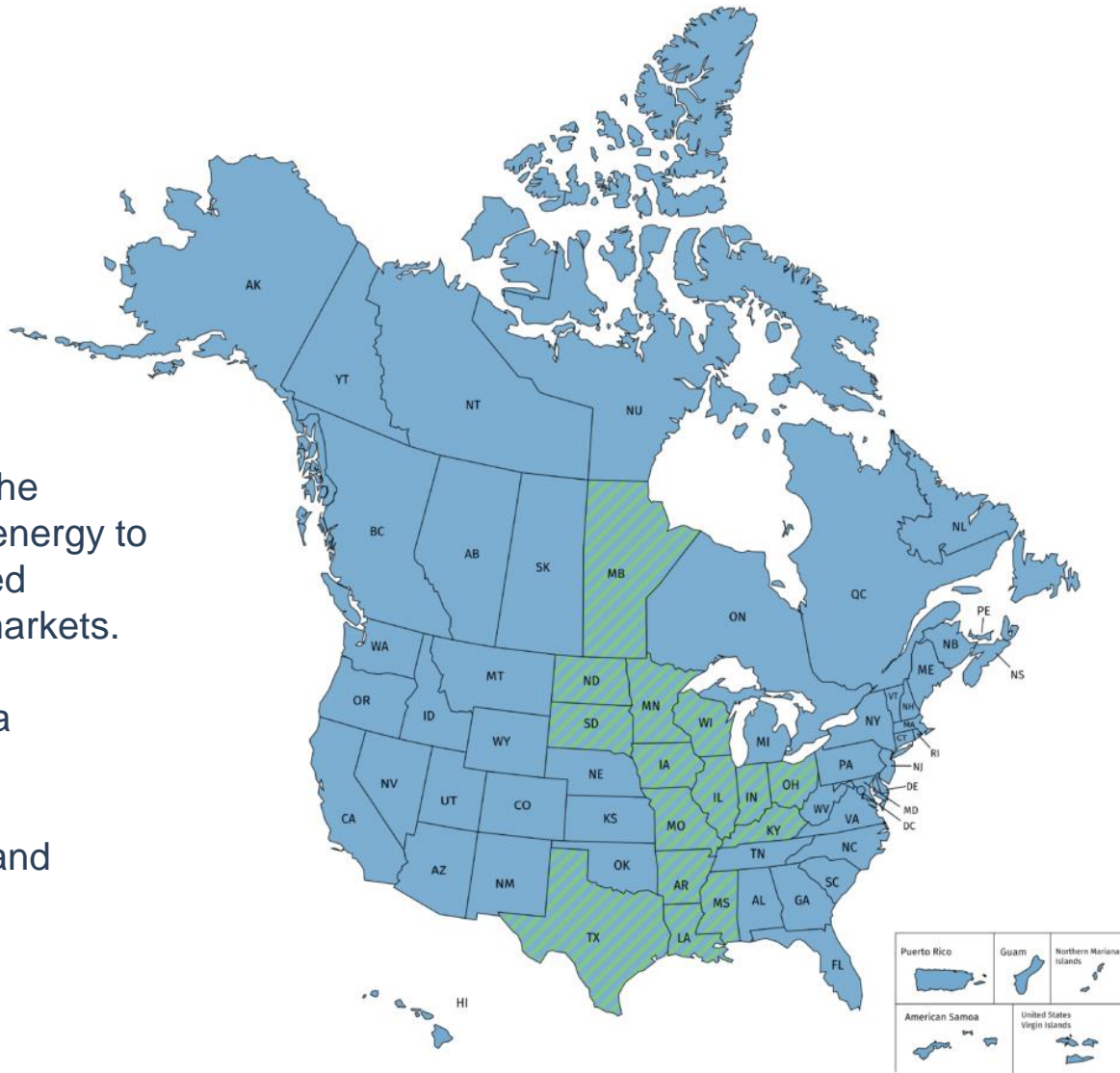
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Agenda

- Background
- Why a certificate tracking system
- System screenshots
- Next steps

Background

- Mission: M-RETS validates the environmental attributes of energy to serve as a trusted centralized gateway to environmental markets.
- Independent non-profit with a stakeholder board.
- M-RETS tracks in all states and provinces.



M-RETS Renewable Energy Certificate Tracking Locations

- M-RETS Voluntary Market Generator Registration
- M-RETS Compliance & Voluntary Market Generator Registration

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Why do certificate tracking systems exist?

Generate.

Streamline credit management and prevent double counting

Compliance.

Provide regulators with an independent, easy to use, and reliable source to verify compliance

Liquidity.

Provide a mechanism to manage holdings, effectuate transactions, and maintain claims

RNG Tracking System Goal

A web-based tracking system that both supports existing markets and establishes robust new markets through:

- **Increased market transparency**
- Higher level of integrity and assurance
- Increase liquidity(both exchange-based and OTC)
- **Scientifically validated carbon values to facilitate GHG reduction claims**

EU RNG GO Scheme / Danish Biomethane

**BMGoO # Country # Registry # Plant #
metering point # prodfromdate # prodtodate
timestamp # checkcharacter**

- **BMGoO** = Biomethane GoO
- **Country** = Country Code (like AT, CH, DE, DK, FR, UK etc.).
- **Registry** = Biomethane registry, alias
- **Metering point** = Metering point, number
- **Prodfromdate** = From date, date when injection of biomethane started
- **Prodtodate** = To date, date when injection of biomethane ended
- **Timestamp** (of GoO created)
- **Check character:** The check character can be based on a various number of previous characters used to ensure the validity of the ID. The principle of the check character is a standard for ID validation. The implementation of an algorithm for the calculation of the check character must be agreed mutually

For each Biomethane Certificate, the following is registered:

- CVR number of the Biogas Facility
- Location of the Biogas Facility
- Capacity of the Biogas Facility in kWh/year
- Start-up date of the Biogas Facility
- Type of the Biogas Facility
- GSRN for Metering Point for Price Supplement
- Issuing body
- Date of issue
- Country of issue
- Identification number of certificate
- Unit used in the certificate (1 MWh)
- Production period for the Biomethane
- Expiry date (12 months after date of production).

Renewable Thermal System

M-RETS Main RT Organization Alice Super

Dashboard Certificates Transactions Accounts Projects Generation Help Documentation

Certificates

Active Retired

7,845 RTs

Transfer Retire Reset Settings Download

<input type="checkbox"/>	Account	M-RETS ID	Project	Fuel Type	Vintage	Location	Quantity	Serial Numbers	
	Filter...	Filter...	Filter...	Filter...	Filter...	Filter...	Filter...	Filter	
<input type="checkbox"/>	My biogas account	T1111	My Biogas generator -- active	Biogas	11/2016	ND	6200	11111-ND-11-2016-13500	Details
<input type="checkbox"/>	My biogas account	T1111	My Biogas generator -- active	Biogas	12/2016	ND	1000	11111-ND-12-2016-11515	Details
<input type="checkbox"/>	My biogas account	T1111	My Biogas generator -- active	Biogas	09/2018	ND	500	11111-ND-09-2018-11516	Details
<input type="checkbox"/>	My biogas account	T1111	My Biogas generator -- active	Biogas	08/2018	ND	100	11111-ND-08-2018-11517	Details
<input type="checkbox"/>	RTs account 2	T1111	My Biogas generator -- active	Biogas	10/2018	ND	45	11111-ND-08-2010-11518	Details

RT batch details



Serial Numbers 11112-ND-08-2018-11526-1 to 600

Account	ID	Project	Fuel Type	Vintage	Location	Quantity
RTs account	14D14EA3-136B	RNG Project 1	Renewable Natural Gas	08/2018	ND	600

Carbon Pathways

Name	Tool Name	Carbon Intensity	Date Range	Document
RNG LCA #1	GHGenious	0.25	2018-01-01 - 2020-01-01	t2n-1248_report.pdf

Eligibilities

No eligibilities available

RT batch details



Serial Numbers 11111-ND-08-2010-11518-46 to 50

Account	ID	Fuel Type	Vintage	Project	Quantity
Retirement account 1	0846C21E-F5F6	Biogas	10/2018	My Biogas generator -- active	5

Carbon Pathways

Name	Tool Name	Carbon Intensity	Date Range	Document
Landfill Gas	GREET	-78.0	2018-08-01 - 2020-08-01	t2n-1248_report.pdf

Notes: For LCFS Compliance 2019

Eligibility

Period: 2019

Retired For: CA

Important Market Dynamics

A modern registry platform works to support goals of regulators and those seeking to verify, certify, and/or market claims and builds trust between all parties.

It should be flexible enough to accommodate:

- System compatibility – 1 system nationally
- Pass/fail vs. calculated carbon reductions
- **Compliance and voluntary markets**

Why M-RETS?

Well-Established Relationships.

M-RETS maintains strong relationships with many state regulators

Industry Credibility.

A long track record in commodity tracking among clean energy stakeholders

Proven Platform.

Using the M-RETS platform saves high initial startup costs and ensures a stable rollout

Responsiveness.

In-house development staff

Business Model.

501(C)(4) status allows M-RETS to focus resources on maintenance and improvements

Accepted Practice.

Similar market structures and complimentary processes between RECs and RNG justify using a system already trusted by regulators and market participants



THANK YOU

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