

# Toward an Integrated North American Market for TRCs

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# Introduction

With natural gas supplies getting tight and natural gas prices highly volatile, renewable energy generation is a timely investment. Renewable generation hedges against gas price and supply fluctuation. To the extent that the choice is between a new natural gas plant and a renewable generator, the renewable generator uses an indigenous resource, freeing up natural gas for export.

Renewables are cost competitive with new gas-fired facilities depending upon the natural gas forecast being used in the analysis.

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# Introduction

Not only are renewable resources a good investment today, there are expanding market opportunities that did not exist just four or five years ago. There are two pathways for selling renewable energy today. The most common one is the use of the transmission lines to move the electricity to market to sell to a local utility. But a second path is through the use of renewable energy certificates (TRC). TRCs provide the opportunity to sell the renewable energy attributes into a broader market not constrained by transmission lines or local utility interest. This results in the opportunity to sell the renewable attributes to more economically attractive purchasers and provide another revenue source for the renewable energy seller.

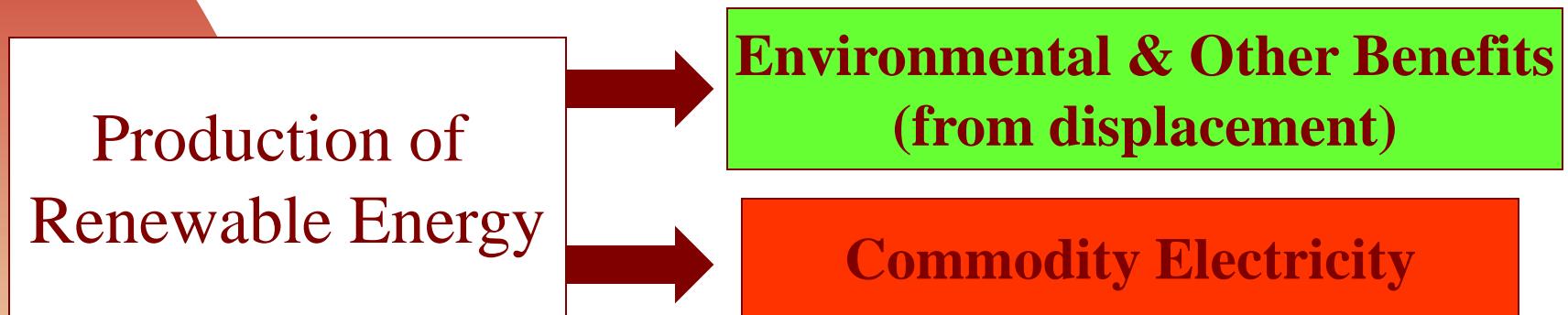
The following presentation focuses on this second pathway, renewable energy certificates (TRCs): how they are created, some of the issues and some of the strategies that are being developed to support a broad market for renewables in North America.

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# Introduction to TRCs



- *Certificates represent the contractual right to claim the environmental and other attributes associated with electricity generated from a renewable energy facility*
- *May be traded independently of energy markets*

# What's in a Name

- Green Tags
- Green Tickets
- Renewable Credits
- Renewable Certificates
- RECs
- **Tradable Renewable Certificates (TRC)**
- T-RECS

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# How are TRCs Created

- Through a Contract with a generator
- Issued by a TRC Tracking or Accounting System

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# What are the Issues?

- Who Owns the TRCs?
- What Claims are being made?
- Are they legal & easily understood?
- How many TRCs were sold?
- How many TRCs were purchased?

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# TRC Issues (cont.)

- Were the types of TRCs purchased consistent with the product claims?
- Was there any double counting?
- Was the price being charged fair?

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# Barriers & Challenges

- Need accurate and verifiable generation data
- Need a credible mechanism for issuing certificates
- Need a method for tracking certificate ownership
- Need to know what certificate represents
- Need to protect against double counting

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# How are these questions answered?

- Tracking/Accounting Systems
- Regulatory Oversight
- Certification/Registration
- Verification

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# Tracking Systems

- Verify Type of Generator
  - Generator registration/verification
- Issue TRCs to Generators
- How many TRCs were purchased?
  - Verify property rights and amount in specific accounts
  - Verify types of TRCs in accounts
- Was there any double counting?
  - Good within tracking system boundaries

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# Certification/Registration

- Product Certification:
  - TRC Standards & Definitions
  - Labeling & Information Disclosure
- Registration or Facility Certification
  - Is Generating Facility that produced the TRCs what it says it is?
  - Usually Certify and Verify

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# Verification

## Product Verification:

- Compliance Review
  - What TRC Claims are being made?
  - Are they legal & easily understood?
  - Was the consumer properly informed?
- Separate Audit:
  - How many TRCs were sold compared to what was purchased?
  - Were the types of TRCs purchased consistent with the claims made to customers?

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# North American Association of Issuing Bodies (NAAIB)

- Protects against double counting in North America
- Facilitates Imports/Exports among the member tracking systems
- Provides structure for new tracking systems

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# NAAIB – (Cont.)

- Facilitates national and international markets for TRCs and Carbon Offsets
- Provides credibility for Mexican TRCs
- Supports RE financing options

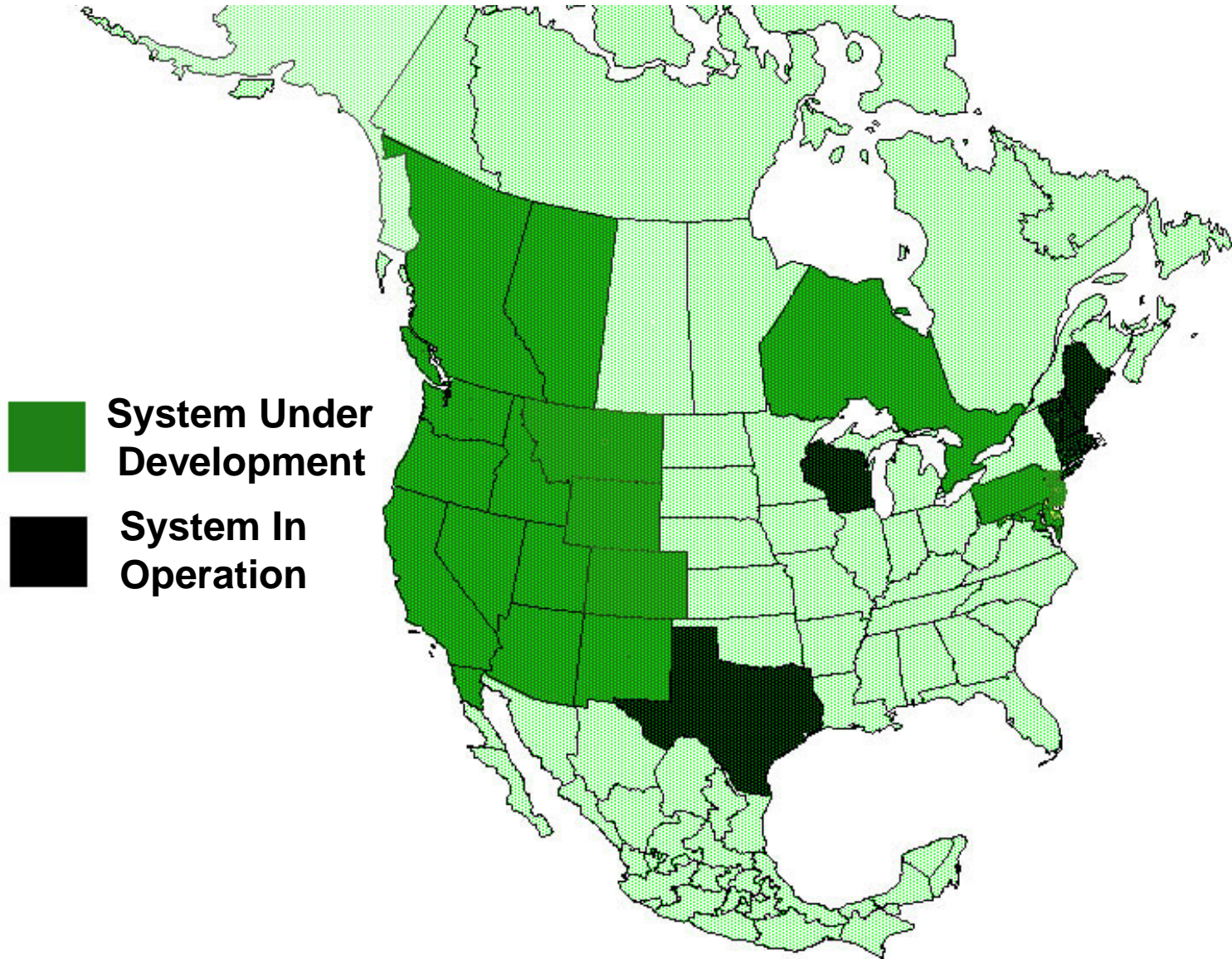
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# WREGIS Geography

## Western Interconnect







# Western Renewable Energy Generation Information System (WREGIS)

- A Western Region Tracking System that includes northern Mexico
- Would like Mexican participation if possible

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# Certification/Verification Example: Green-e Product Standards

## How Created?

- Regional Stakeholder Processes
- Recommendations Approved by Green Power Board (Independent Policy Board)
- Implemented by CRS Staff

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# Green-e TRC Product Standards

- Only new renewables:
  - National RE definition
  - Must include all environmental displacement attributes
  - No mandated or RPS renewables allowed
  - Requires geographic disclosure
  - No double counting

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# Green-e TRC Product Standards

- Regulators must be notified of TRC transaction when a utility is involved
- Customer disclosure & contract information required
- Annual compliance review and verification audit

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# For Additional CRS Information

- **TRC and Green-e Certification:**
  - Gabe Petlin, [gpetlin@resource-solutions.org](mailto:gpetlin@resource-solutions.org)
  - [www.green-e.org/what\\_is/dictionary/trc.html](http://www.green-e.org/what_is/dictionary/trc.html)
- **Green Pricing Accreditation:**
  - Dan Lieberman, [dan@resource-solutions.org](mailto:dan@resource-solutions.org)
- **AAIB, Regulatory Handbook, and National TRC Tracking Initiatives:**
  - Meredith Wingate, [mwingate@resource-solutions.org](mailto:mwingate@resource-solutions.org)
- **Public Renewables Partnership:**
  - Ray Dracker, [rdracker@resource-solutions.org](mailto:rdracker@resource-solutions.org)
  - [www.resource-solutions.org/prp.htm](http://www.resource-solutions.org/prp.htm)
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