

# The LREC/ZREC PROGRAM

**An Opportunity to Develop Behind-The-Meter  
Renewable Generation in Connecticut**



**Connecticut  
Light & Power**

A Northeast Utilities Company



*The United Illuminating Company*

# Program Overview

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# Customers are Interested in Renewable Generation

## Drivers:

- \* To “Go-Green”
- \* To reduce, or better predict, spending on energy

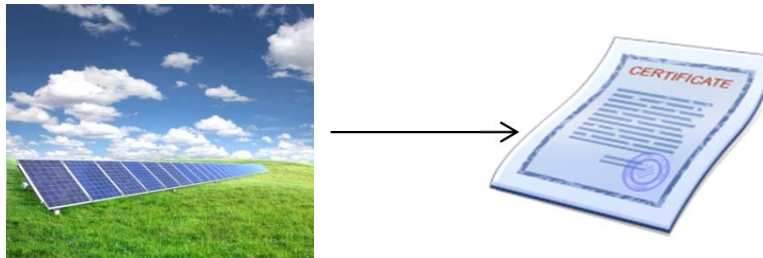
## \* **Barriers:**

- \* Cost of Systems
- \* No clear long-term revenue streams to support capital investments
- \* Public Act 11-80 created an opportunity for developers and installers of small renewable systems
- \* CL&P and UI will enter into 15 year contracts to purchase “RECs” from new small renewable projects

# What is a REC? = Renewable Energy Certificate

## \* How is a REC Created?

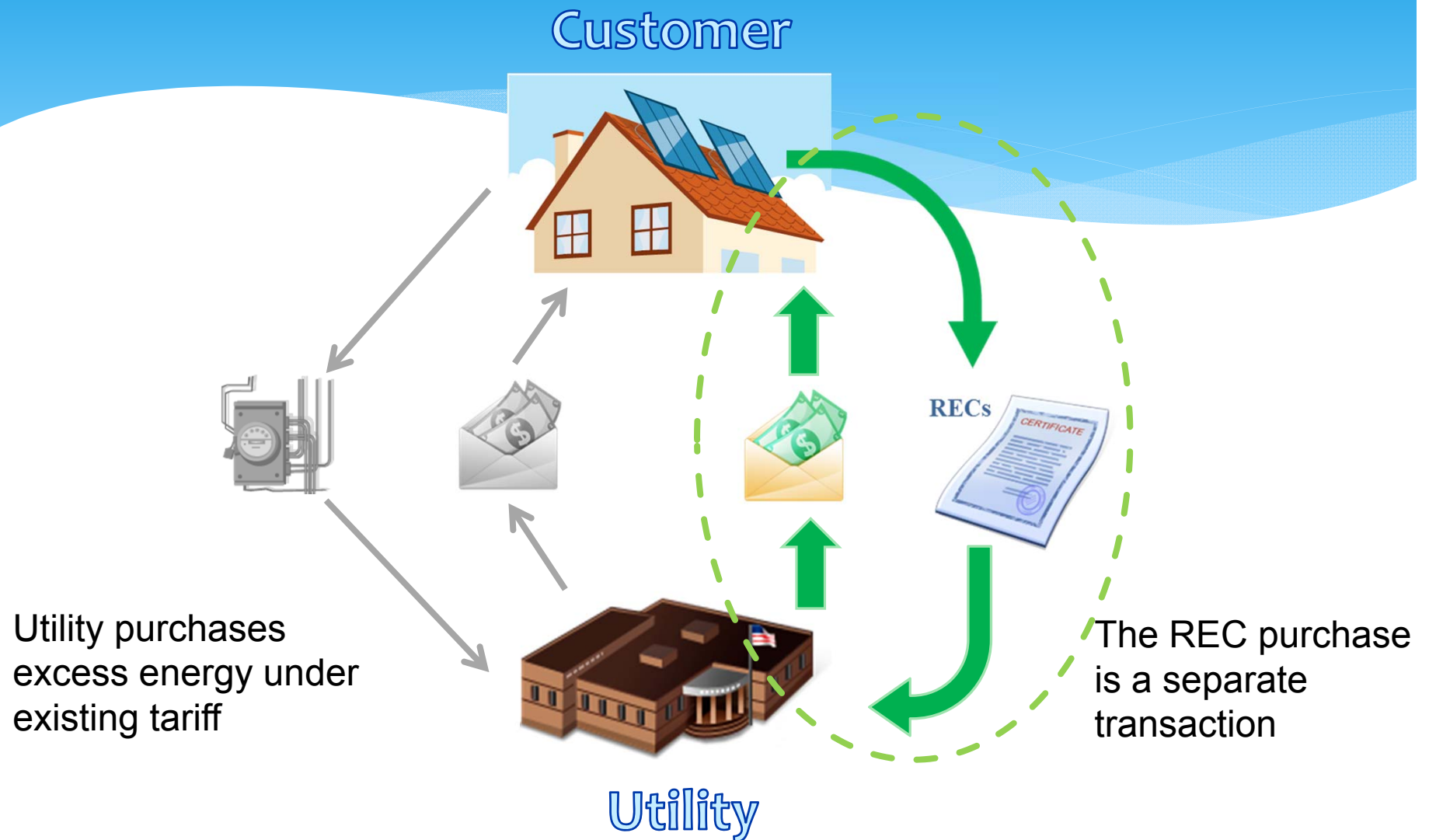
- \* Each time a renewable generation unit produces, the energy is considered “renewable”
  - \* LREC: Low – emission RECs = e.g Fuel Cells
  - \* ZREC: Zero – emission RECs = e.g Solar, Wind, Small Hydro
- \* Each megawatt hour of energy produced = 1 REC



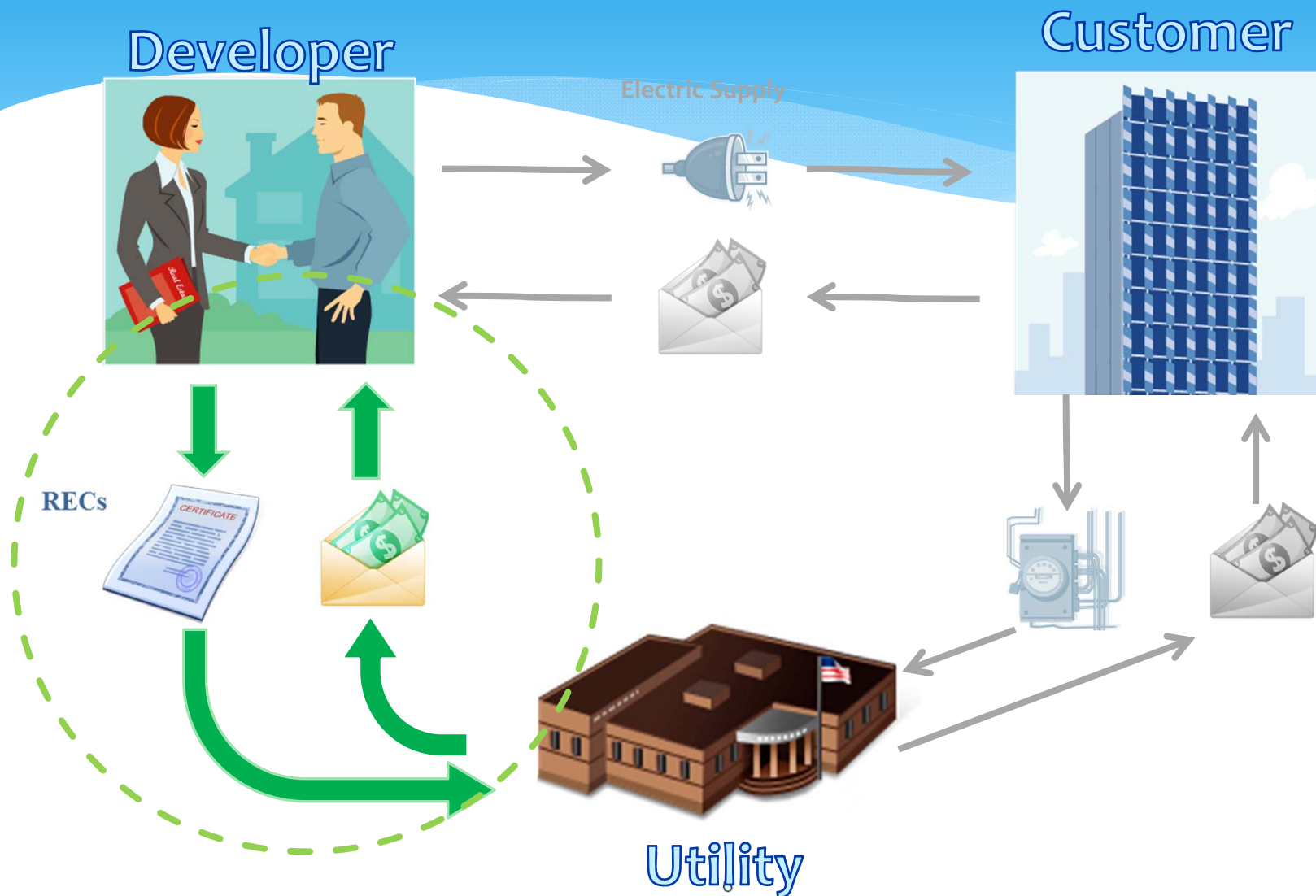
## \* Why Should You Care About RECs?

- \* RECs have a value (commodity) and are used by electric companies to satisfy regulatory requirements (RPS)

# REC Contract directly with customer



# REC Contract with a developer



# Procurement Processes

## 1) Competitive Solicitation - (RFP)

Project Type	Size	Annual Budget	Renewable Energy Credit Price Cap
Large ZRECs	≥250 kW to 1,000 kW	Approximately \$2.7 M	Max. \$350/REC
Medium ZRECs	>100 kW < 250 kW	Approximately \$2.7 M	Max. \$350/REC
LRECs	Up to 2,000 kW	\$4 M	Max. \$200/REC

## 2) Tariff (filed for PURA approval 5/14/12)

Project Type	Size	Annual Budget	Renewable Energy Credit Price Cap
Small ZRECs	Up to 100 kW	Approximately \$2.7 M	Weighted Average of the Medium ZREC price + 10% up to \$350/REC

# Request for Proposals (RFP)

- ❖ RFP covers LREC Projects and ZREC Projects >100 kW
- ❖ Open to customers and developers
- ❖ Projects will be selected, and utilities will enter into 15 year contracts to purchase the ZRECs and LRECs from selected projects
- ❖ Key Program Documents:
  - ❖ RFP, Standard Contract, Solicitation Plan, PURA Decision – Docket 11-12-06, Question and Answer Document (updated periodically)



# LREC & ZREC Eligibility

## General Project Eligibility Criteria

- \* Must be located behind contracting utility distribution meter
- \* Must not have received funding/grants from Clean Energy Finance Investment Authority, or its predecessor the CT Clean Energy Fund (other than low cost financing)
- \* Projects must be in service on, or after, July 1, 2011

### \* LRECs

- \* No larger than 2,000 kW
- \* Must have low emissions
  - \* <0.07 lbs/MWh NOx; <0.10 lbs/MWh CO; 0.02 lb/MWh VOCs, 1 grain per 100 standard cubic feet
- \* May include fuel cells and other low emission Class I resources, as well as all zero emission Class I resources

### \* ZRECs

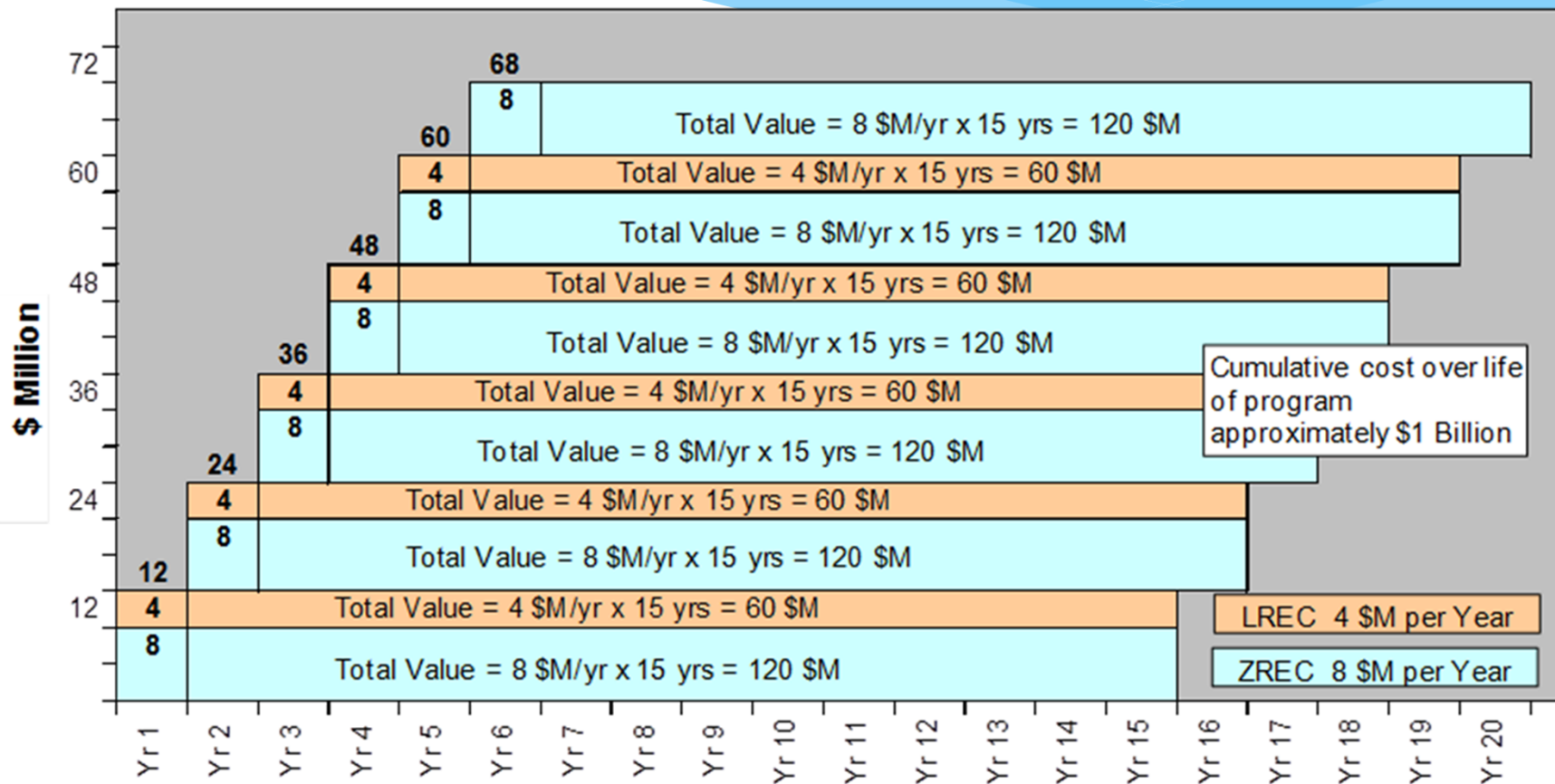
- \* No larger than 1,000 kW
- \* Must have zero emissions
- \* May include solar, hydro and wind

# Quantity & Value of RECs

- ❖ **The contract price of RECs from Zero Emission units is capped at \$350/REC**
- ❖ **Example 1:** 100 kW Solar System ~ 114 RECs/year
  - ❖ Annual Payment ~ \$39,900
    - ❖  $\$350/\text{REC} \times 114 \text{ RECs/year} \sim \$39,900$
  - ❖ Total Payment over 15 years ~ \$600k
- ❖ **The contract price of RECs from Low Emission units is capped at \$200/REC**
- ❖ **Example 2:** 400 kW Fuel Cell ~ 3,154 RECs/year
  - ❖ Annual Payment ~ \$630,700
    - ❖  $\$200/\text{REC} \times 3,154 \sim \$630,700$
  - ❖ Total Payment over 15 years ~ \$9.5M
- ❖ *Examples assume REC prices at the cap. The market will set actual REC prices.*

# Budget & commitment schedule

## LREC & ZREC PROGRAM BUDGETS



# RFP Schedule

ACTION ITEM	DATE
RELEASE OF RFP	MAY, 1, 2012
BIDDERS CONFERENCE	MAY 21, 2012
NOTICE OF INTENT TO BID (OPTIONAL)	MAY 25 2012
DEADLINE FOR SUBMISSION OF QUESTIONS	MAY 29, 2012
FINAL Q&A TO BE POSTED	JUNE 11, 2012
BIDDER RESPONSE FORMS DUE	JUNE 12, 2012 BY 1:00 P.M.
PRICING TO REMAIN FIRM, IRREVOCABLE AND BINDING UNTIL:	AUGUST 1, 2012, 5:00 P.M. (EPT)
SELECTION AND NOTIFICATION OF WINNING BIDDERS	JULY 17, 2012
STANDARD CONTRACTS SIGNED	AUGUST 7, 2012
STANDARD CONTRACT(S) FILED WITH PURA	FOLLOWING SELECTION OF WINNING BIDDER(S) AND EXECUTION OF STANDARD CONTRACTS DURING EACH ROUND.
COMMENCEMENT OF SERVICE	IN ACCORDANCE WITH STANDARD CONTRACTS

# Email and Websites

## ❖ Please submit questions to:

❖ CL&P = [LREC.ZREC.RFP@NU.COM](mailto:LREC.ZREC.RFP@NU.COM)

❖ UI = [lrec.zrec@uinet.com](mailto:lrec.zrec@uinet.com)

## ❖ Please visit LREC/ZREC Websites at:

❖ CL&P = [www.cl-p.com](http://www.cl-p.com), Go to “Going Green” and click on Renewable Energy Credits

❖ UI = [www.uinet.com/powerprocurement](http://www.uinet.com/powerprocurement)