

Opportunities for Biogas Digesters

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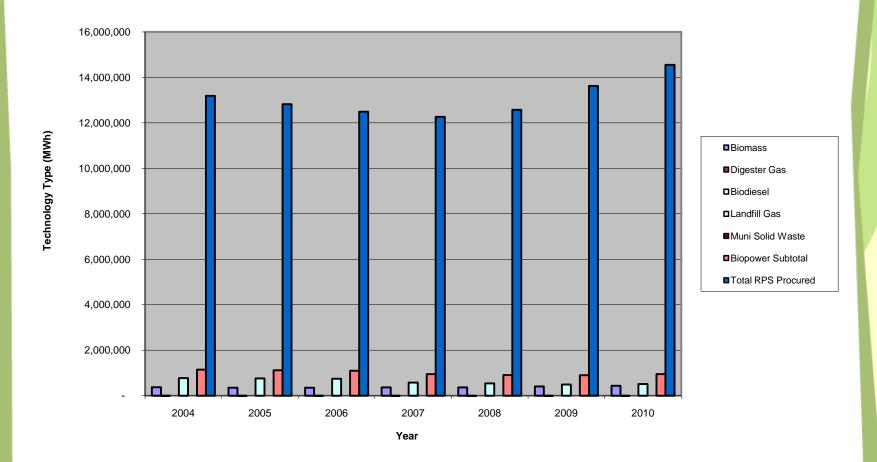
Today's Talk

- Status of feed-in tariffs
- Other options for selling energy from farms to California investor-owned utilities
- Interconnection issues

Acronyms: CPUC = California Public Utilities Commission CEC = California Energy Commission FERC = Federal Energy Regulatory Commission QF = Qualifying Facility, pursuant to Public Utilities Regulatory Policy Act

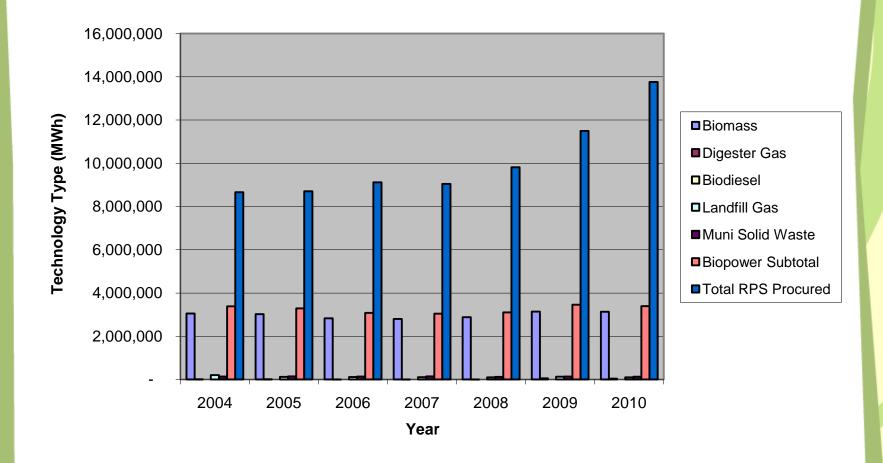


SCE RPS Procurement



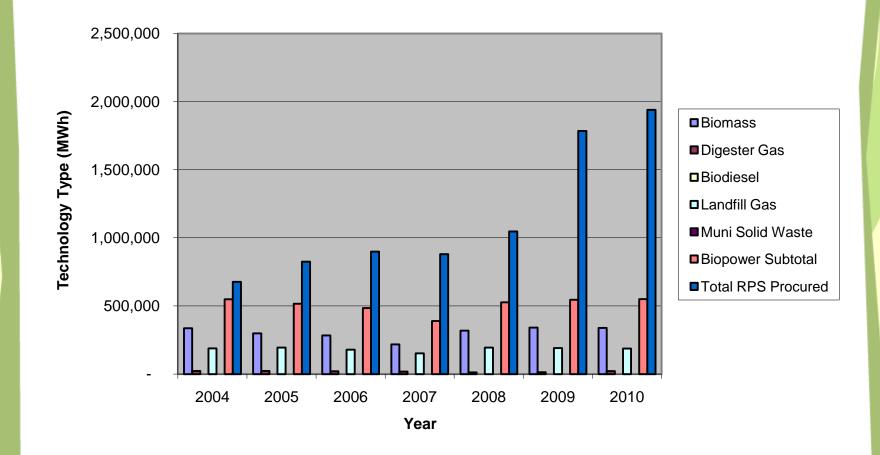


PG&E RPS Procurement





SDG&E RPS Procurement





Options for Selling Energy: "Feed-in Tariff"

- In 2007, CPUC adopted tariff for projects up to 1.5 MW
- Payment based on utility avoided cost
- Senate Bill 32 (2009) directs CPUC to:
 - Expand tariff to projects up to 3 MW
 - Include externalities in determining payment
 - Cap participation at 750 MW statewide
- CPUC now moving to implement SB 32



Pricing Provisions in SB 32

- 1. Market price determined by the Commission
- 2. Long-term market price for fixed price contracts
- 3. Long term operating and fuel costs
- 4. Value of electricity products, e.g., base load, peaking and asavailable
- 5. Kilowatt hour price
- 6. Ratepayer indifference
- 7. 10, 15, and 20 year contract terms

8. All current and anticipated environmental compliance costs Two optional inputs:

- 1. Time of Delivery, and
- 2. Locational Distribution Circuit adder



Sustainable Conservation's Recommended Principles for a Feed-in Tariff

- The program should be easy to access, understand, and implement.
 - The Commission must ensure that diverse resources are able to participate.
 - Pricing under this tariff must recognize the contributions of different renewable technologies (baseload vs. intermittent), as dictated in SB 32.
 - The Investor Owned Utilities should demonstrate ownership of the outcome and not just the process (i.e., success at overcoming hurdles to bringing new facilities on line).



Options for Selling Energy: CA Self-Generation Incentive Program

- Biogas was eligible until 2008
- Senate Bill 412 (2009) directed CPUC to expand eligibility
- CPUC Decision 11-09-015 last week
 - Sets a good price, but retains requirement that project must be sized to meet load



Options for Selling Energy: Combined Heat and Power

- CPUC decision 12/09 authorized sales, pursuant to Assembly Bill 1613 (2007)
- Utilities protested
- FERC Order 7/10 says CPUC decision can hold if:
 - Facility registers as a QF
 - Payment is at utility's avoided cost
 - Otherwise it's a wholesale power transaction
- CPUC moving forward
 - Developing a special tariff for projects under 500 kW



Options for Selling Energy: Renewable Auction Mechanism

- Projects up to 20 MW
- Program cap of 1000 MW
- Bids awarded by utility starting with lowest bidder until auction cap is reached
- Utilities in process of planning first solicitation



Options for Selling Energy: Net Metering

- Only applicable to wind and solar
 SB 489 pending on Governor's desk would
 - allow more technologies to participate
- Systems 1-kW 1 MW
- Cap 2.5% of customer peak demand
 - PG&E voluntarily raising cap slightly
- CPUC has adopted method for compensating for excess sales from net metering



Options for Selling Energy: Local Government Generation Offset

- Assembly Bill 2466 (2008) allows a local government to net electricity use off a renewable system owned, operated, or on property under its control
 - Systems up to 1 MW
- Excess sales value set at utility generation price



Options for Selling Energy: California Solar Initiative

- Authorized by Senate Bill 1 (2006)
- Different incentives for solar systems under, above 50 kW
- Fixed incentive pool through 2016
- Incentives decline as online capacity increases
- SB 585 pending with Governor, would replenish the incentive pool



Interconnection Challenges

- Very few farms have interconnected under current feed-in tariff
 - Lengthy, unpredictable process
 - High cost
 - Sustainable Conservation raising concerns, proposing solutions with legislators, regulators, utilities



Fixing Interconnection

 CPUC sponsoring a settlement process for interconnection. Next meeting is tomorrow.
CPUC next week will open a rulemaking to improve distribution level interconnection rules and regulations for certain classes of electric generators and electric storage resources.

