PV Collaborative
PV Strategy Concepts
DRAFT 10-08-04

The following draft comments reflect some of the internal MTC discussion concepts after the 9/30/04 meeting of the MTC Board of Directors. Further comments and suggested improvements will be discussed at the full plenary PV Collaborative meeting on 10-8-04.

PV Strategy Concepts

The MTC PV strategy will be integrated into the Green Buildings and Infrastructure programs, the Industry Support programs, and the Education and Public Awareness programs. The MTC PV strategy will focus in three areas:

- Industry Support
  - Investments in MA businesses
  - Loans to MA businesses
  - PV Export program
- Education and Training
  - NESEA Building Energy Conference
  - Green Buildings Case Studies
  - NABCEP Certification
  - Training for Building Inspectors & Code Officials
  - Clean Energy Tour
  - MCEC Funded Projects
  - Etc.
- PV Installations
  - Small systems; open process
  - Larger systems; competitive selection process
  - Public benefits via targeted opportunities
    - Green Schools
    - Energy Star Low Income/Affordable Housing
    - Utility Partnerships
    - Other potential future opportunities such as loans, green mortgages, etc.

- These conceptual program areas will be served via a multi-million dollar, multi-year commitment by MTC.

PV Installations to be delivered via a variety of programs integrated into the existing and planned Green Buildings and Infrastructure programs.

	Small Systems (up to 10 kW)	**Larger Systems (over 10 kW)**	**Public Buildings & Low Income**
Delivery type	Open process	Competitive rounds	Partnerships
Annual budget	$ X million	$ X million	$ 2X million
Base incentive ($ / watt dc)	$2.00	$2.00	N/A
Mass-manufactured PV panels	$1.00	$1.00	N/A
Mass-manufactured inverter(s)	$0.50	$0.50	N/A
Economic Target Areas	$0.50	$0.50	N/A
Public Buildings	$1.00	$1.00	N/A
Security-related w/ back-up	$0.50	$0.50	N/A
Building Integrated PV	$1.00	$1.00	N/A
RECs to MTC	$.50	$.50	N/A
Green Buildings/LEED	N/A	$1.75	N/A
Maximum incentive	***$50,000/grant***	***$500,000/grant***	N/A

NOTES TO PV COLLABORATIVE

1. The numbers in the matrix reflect preliminary thinking.
2. The following further issues for consideration were identified during the discussion at the PV collaborative meeting on 9/13:

- **% loan:** Should the base incentive be all (or part) a 0% interest loan rather than a grant? If so, for which sectors?
- **Declining incentives:** How best to incorporate? Should the base incentive decline? The maximum incentive? The adders?
- **Continuity:** What numbers should be set for the 5-year program period and which would MTC be free to adjust (to "turn the knobs" on the market)? Should the base incentive be fixed and the adders variable?
- **Fixed costs:** Some costs reflected in the adders are fixed, not variable based on system size (kW).
- **RECs:** How best to handle: Customer keeps? MTC gets? Customer choice with an adder if MTC gets?
- **Rationale:** Need one for each adder.
- **Adders:** To set the adders, need to know 1) the incremental cost (if any); and 2) additional amount needed/wanted to direct installations in that area.
- **Explanation:** Add text explaining approach and meaning of the table

ADDITIONAL PROGRAM DESIGN ELEMENTS

NOTE: The following program design elements are important, but did not fit easily anywhere else:

- **Caps:** In order to prevent a small number of large systems from taking a large share of the available funds, the size of systems should be capped.
    - Residential systems: 2.5 kW
    - Commercial systems: 100 kW

- **Capacity-based rather time based:** The incentives should decline as blocks of capacity are filled rather than according to a time schedule.
    - This enhances competition.
    - It also allows the program to be framed around a MW goal rather than an annual budget.

INDUSTRY, MARKET, AND PRODUCT DEVELOPMENT

The installation programs should be accompanied by a set of industry, market, and product development initiatives. This integrated approach will speed the development of the market and maximize industry development and cost reduction. These initiatives should include:

- PV Export initiative
- Direct investments in companies
- Low-cost financing
- Business/market/application/technology development support (grants/cost share contracts)
- SEBANE support
- Regulatory barriers reduction
- Training