

Helio mU

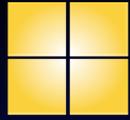
Development Strategies for Solar PV Retrofits

New Foundations for Community-based Energy Efficiency:
Plans , Programs, and Transformational Changes to Housing

June 17, 2009

Tom Millhoff - Helio Micro Utility

www.HelioMU.com



Helio mU

Overview

- Solar Developers vs. EPC's
- Solar Incentives
- Optimization Tactics
- Development Strategies



Solar Developers vs. EPCs

Industry Specific

- HmU holds MASH Rebate Reservation #1
- Active MASH policy participants
- Partner: Citi Community Capital (Andrew Ditton LISC/NEF)
- Agreements for 12 MASH-financed PPA retrofit properties



Structured Financing

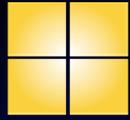
- Team has financed over 30mW in PPAs
- Led quantitative modeling for California Solar Energy Industry Assoc
- Influenced state and federal solar legislation
- VP Project Finance Greg Rosen: Opportunistic, creative and driven

Asset Management

- Team has over 1000 Solar installations, over 180mW of module sales
- Asset Management: rigorous hardware/ installer qualification
- Network Operations Center: Monitoring, Operations & Maintenance

Leverage via Scale and Independence

- Relationships with over 150 EPC firms throughout the US
- Ability to take projects to bid for best price
- Buying Power: Direct Manufacturer Agreements



Helio mU

Solar Incentives

www.HeliomU.com



Solar Incentives: compelling...

Gross Perception		The Promise
\$5.50/W	Turnkey Price	Cheap modules
(\$1.65)	ITC/ARRA Cash Grant	30%
(\$0.82)	Bonus Depreciation	50% of Basis
(\$0.16)	MACRS Depreciation	+10% of Basis
(\$3.90)	MASH Rebate	85% Track 1B

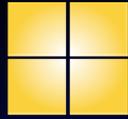


Solar Incentives: compelling...

Gross Perception	
\$5.50/W	Turnkey Price
(\$1.65)	ITC/ARRA Cash Grant
(\$0.82)	Bonus Depreciation
(\$0.16)	MACRS Depreciation
<u>(\$3.90)</u>	<u>MASH Rebate</u>
(\$1.03)/W	Net Investment 1st yr

They'll pay us
to go solar!

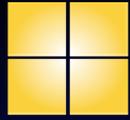




Helio mU

...but inadequate.

Gross Perception		Net Reality
\$5.50/W	Turnkey Price	Complex Retrofits
(\$1.65)	ITC/ARRA Cash Grant	Non Profits? CA Tax?
(\$0.82)	Bonus Depreciation	Sunsets 2009
(\$0.16)	MACRS Depreciation	Non Profits?
<u>(\$3.90)</u>	<u>MASH Rebate</u>	<u>Track 1A, DC vs. AC,</u> <u>Tax</u>
(\$1.03)/W	Net Investment 1st yr	\$3.00 to \$4.50/W



Helio mU

Optimization Tactics

- Capture Incentives
- Leverage Solar Expertise
- Define and Maximize Benefits
- Minimize Risk



Capture Incentives...

ITC

Deprec.

MASH

Loan Guar.

Grants

Other



...Leverage Solar Expertise...

Buying Leverage

Pricing Leverage

Operations & Maint.

Perform. Monitor

ITC

Deprec.

MASH

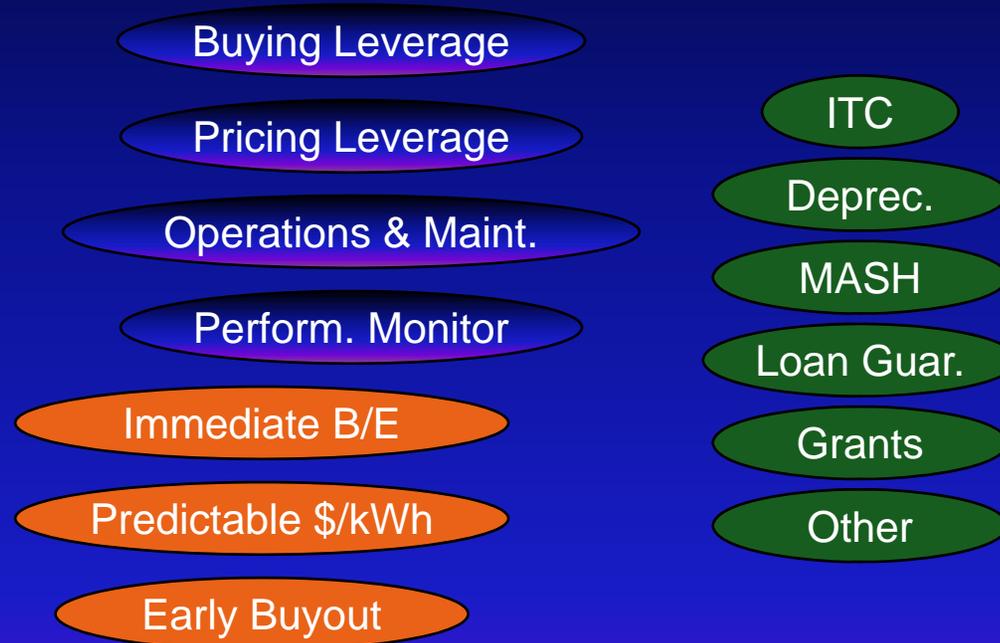
Loan Guar.

Grants

Other



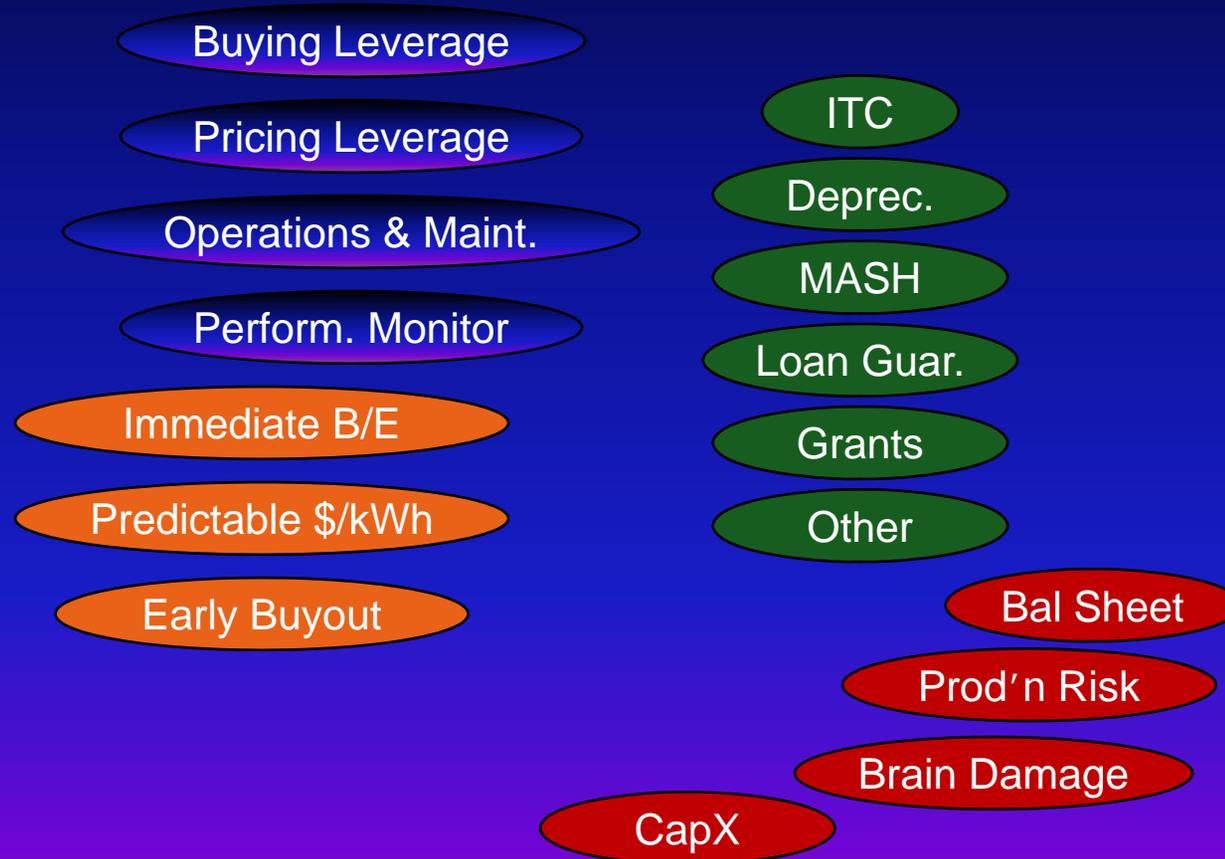
...Maximize Benefits...

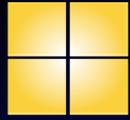




Helio mU

...Minimize Risk.

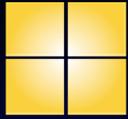




Helio mU

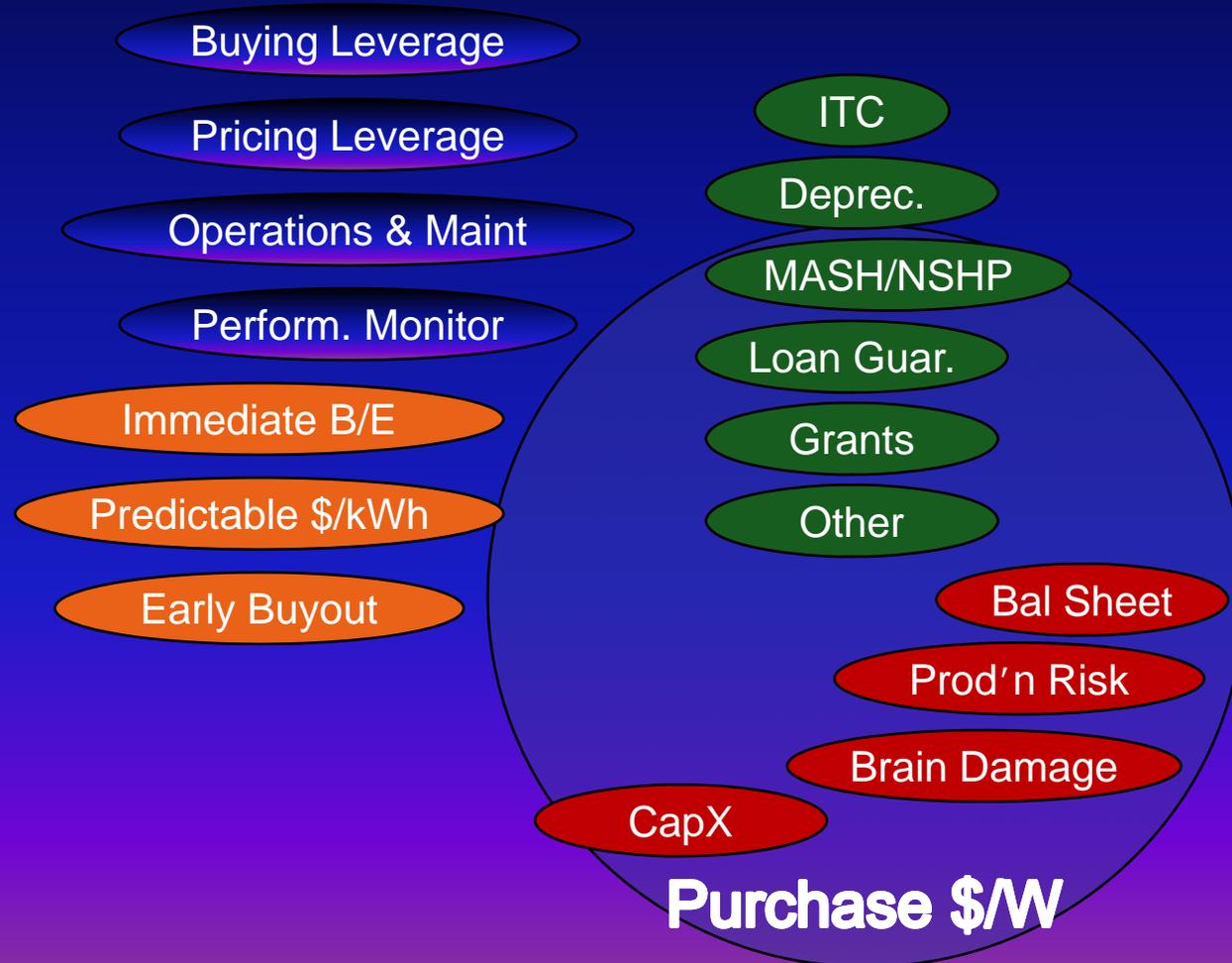
Development Strategies

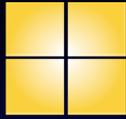
- Capital Purchase
- Lease
- PPA



Helio mU

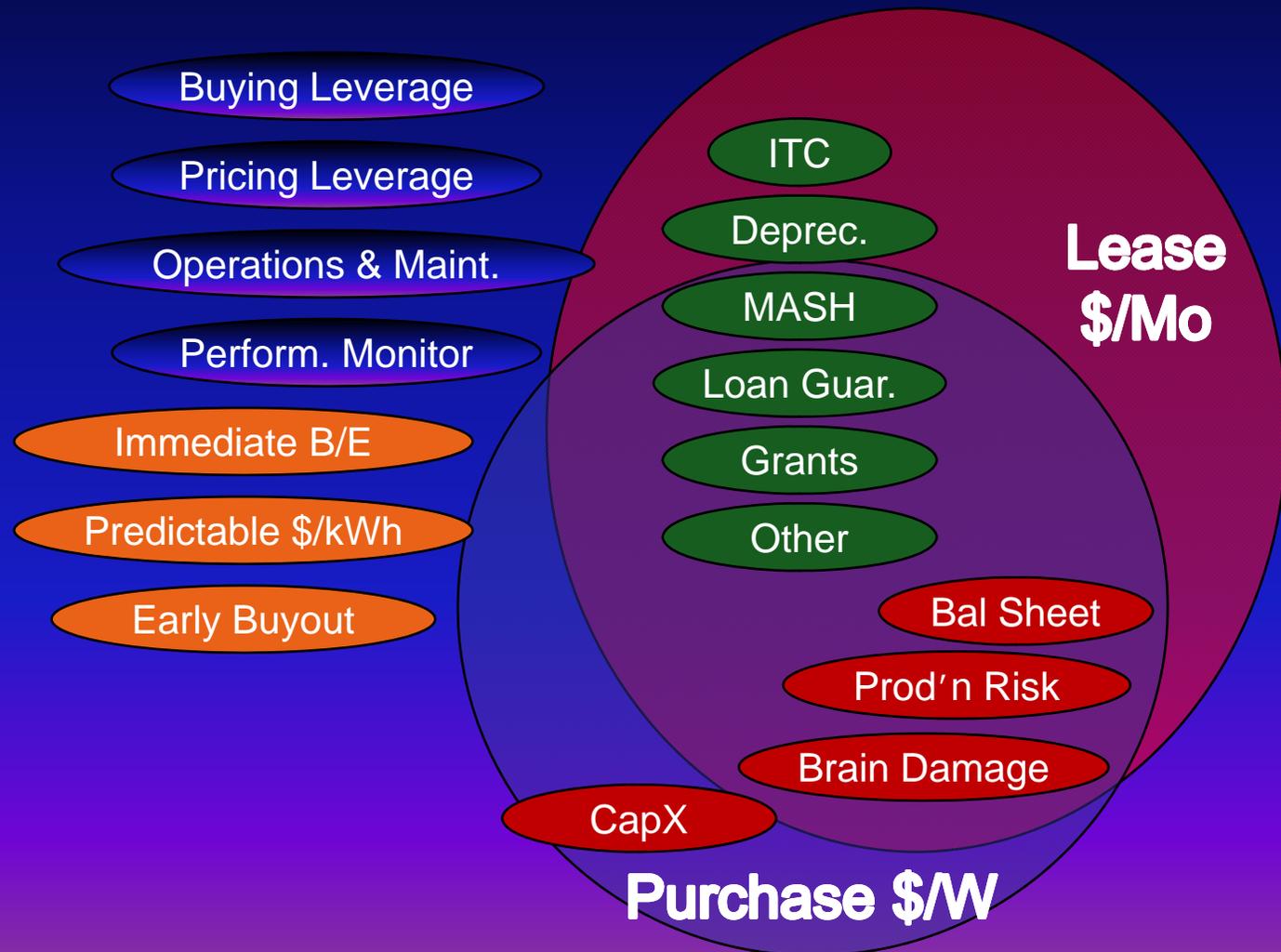
Capital Purchase: *let your LP buy it*





Helio mU

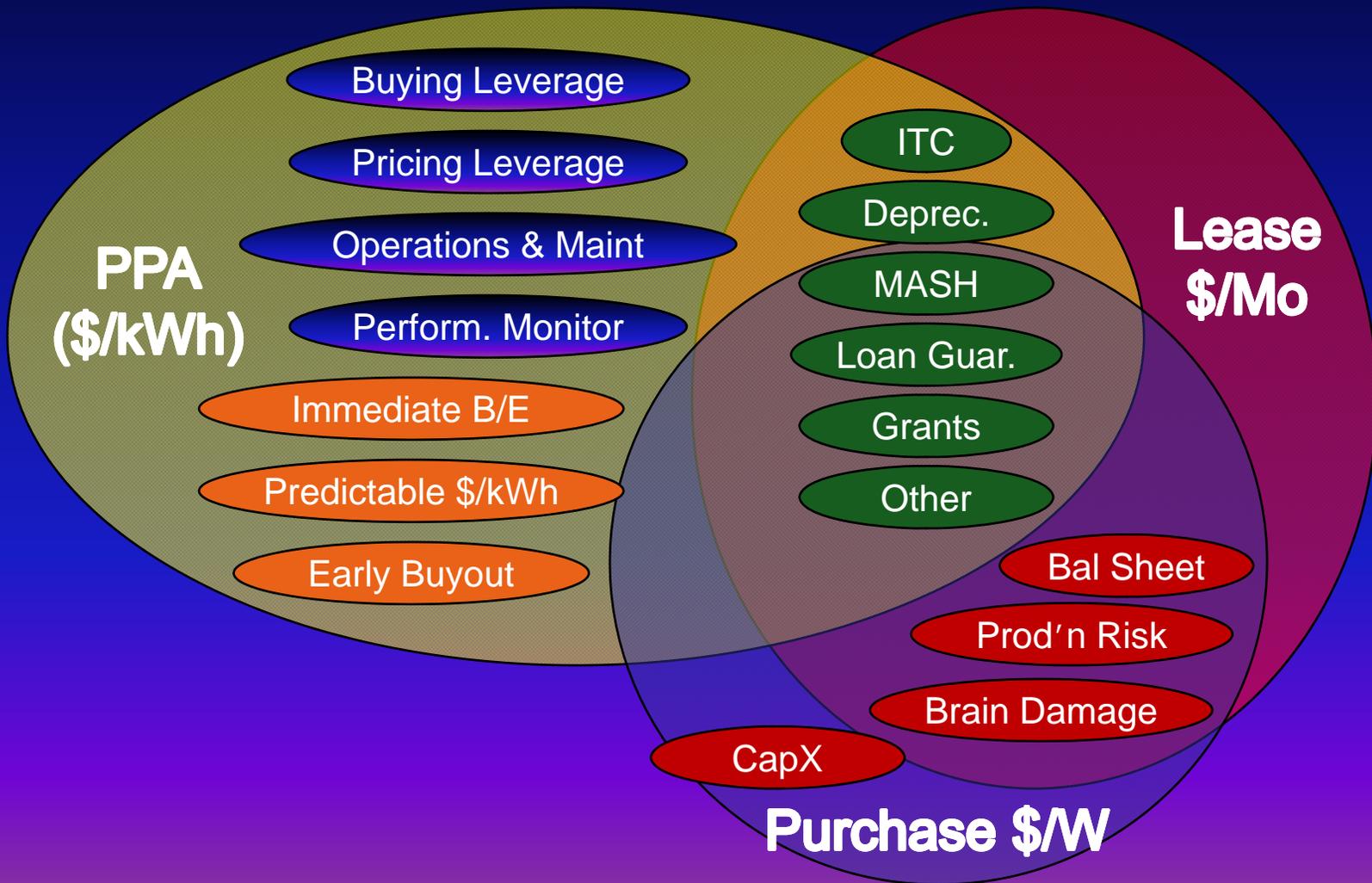
Lease: *financial benefits only*

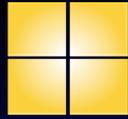




Helio mU

PPA: *flexible enough to optimize risk/reward*





Helio mU

Thank You!

Tom Millhoff
VP Business Development
Helio Micro Utility
510.860.4770
tmillhoff@heliomu.com

www.HeliomU.com