



Helio mU

Development Strategies for PV Retrofits

Greening San Diego's Affordable Housing
Panel #3 – Financing a Green Project

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Helio mU Agenda

- About Helio mU
- Incentives: Compelling but Inadequate
- PV Financing Alternatives
- PPAs & “Avoided Cost”
- Timing Implications



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About Helio mU

Affordable Housing Focus

- MASH Reservation #1, 24 MASH app's, 20 pending
- Veteran/Active MASH policy participants/influencers
- Partner: Citi Community Capital (Andrew Ditton LISC/NEF)



Solar Structured Financing

- Team has financed over 30mW in PPAs
- Led quantitative modeling for California Solar Energy Industry Assoc
- Influenced state and federal solar legislation

Solar Asset Mgmt

- Team has over 900 Solar installations, over 180mW of module sales
- Asset Management: rigorous hardware/ installer qualification
- Network Operations Center: Monitoring, Operations & Maintenance

Solar Leverage

- Relationships with over 150 EPC firms throughout the US
- Ability to take projects to bid for best price
- Buying Power: direct manufacturer agreements



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Incentives: Compelling...

Gross Perception		Rationale
\$5.50/W	Turnkey Price	“Cheap Modules!”
(\$1.65)	ITC/ARRA Cash Grant	30% 1 st yr Discount!
(\$0.82)	Bonus Depreciation	15% 1 st yr; 20% IRR!
(\$0.16)	MACRS Depreciation	Over 5 yrs
<u>(\$3.90)</u>	<u>MASH Rebate</u>	<u>Track 1B Tenant</u>
(\$1.03)/W	Net Investment 1st yr	“Call the CFO..”



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Incentives: ...Inadequate

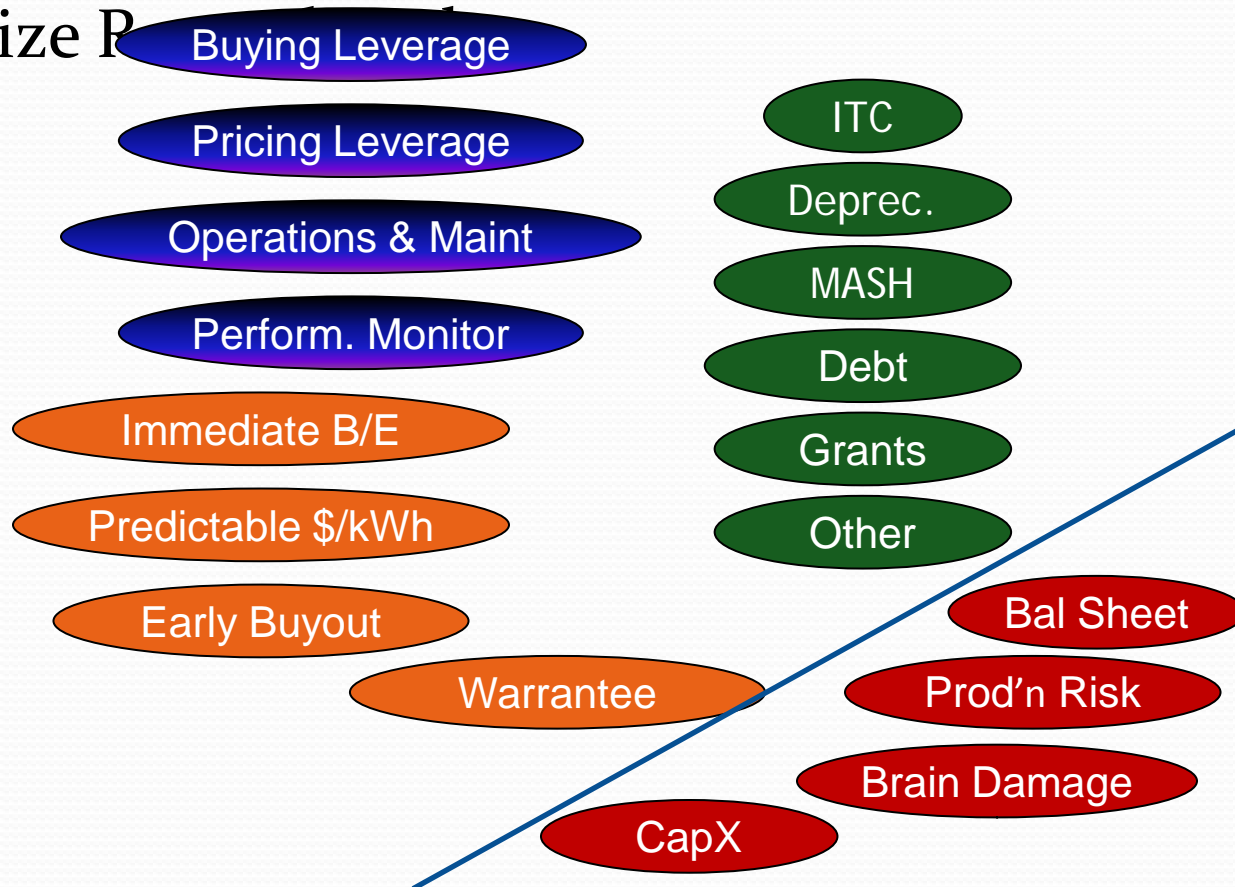
Gross Perception		Net Reality
“Cheap Modules!”	Turnkey Price	Complex Retrofits
30% 1 st yr Discount!	ITC/ARRA Cash Grant	Non Profits? CA Tax?
15% 1 st yr; 20% IRR!	Bonus Depreciation	Sunsets 2009
Over 5 yrs	MACRS Depreciation	Non Profits?
<u>Track 1B Tenant</u>	<u>MASH Rebate</u>	<u>Track 1A, DC vs. AC, Tax</u>
(\$1.03)/W	Net Investment 1st yr	+\$3.00 to \$4.50/W GAP FINANCING



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Maximize Reward/Risk

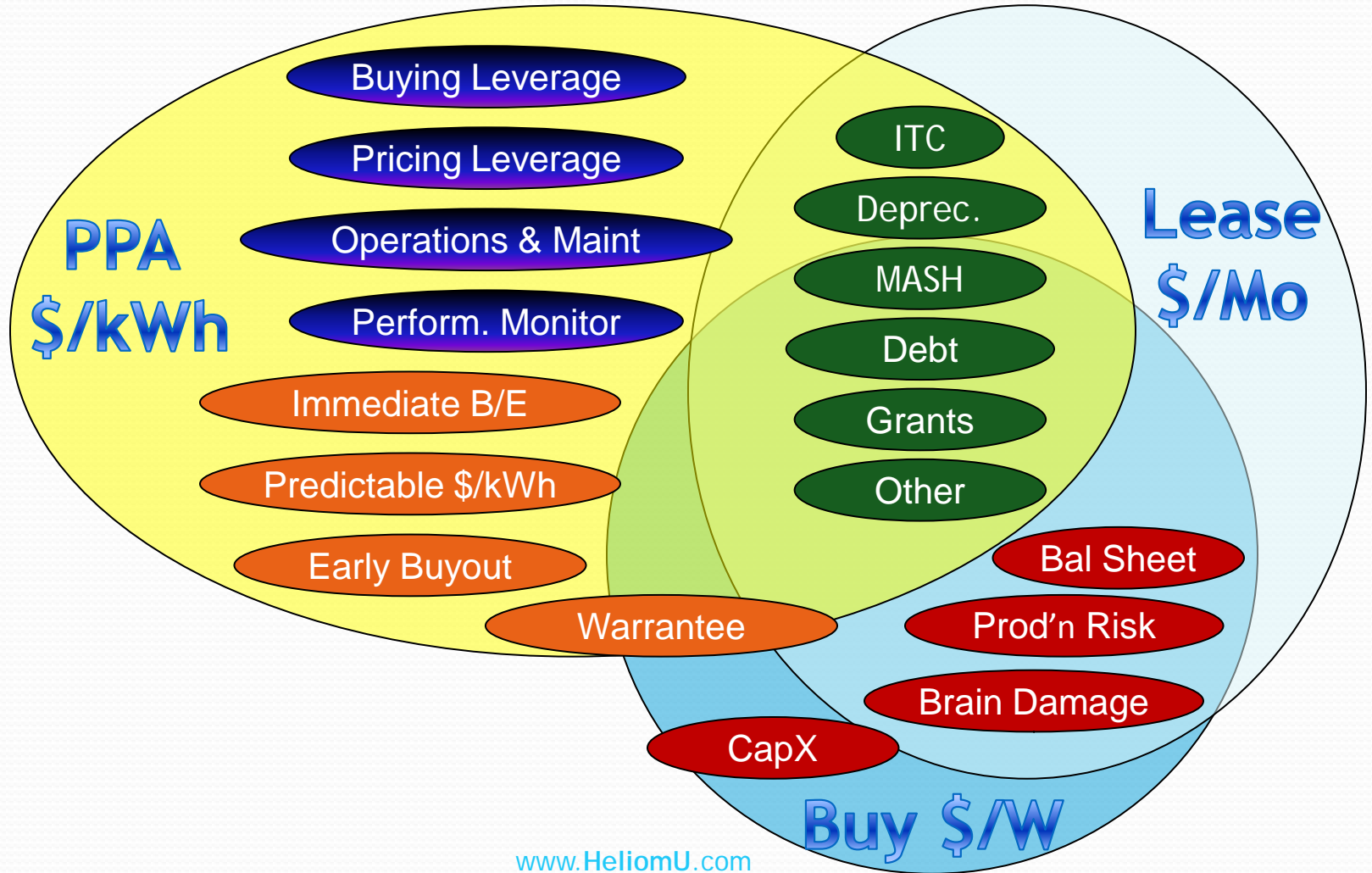
- Maximize Reward





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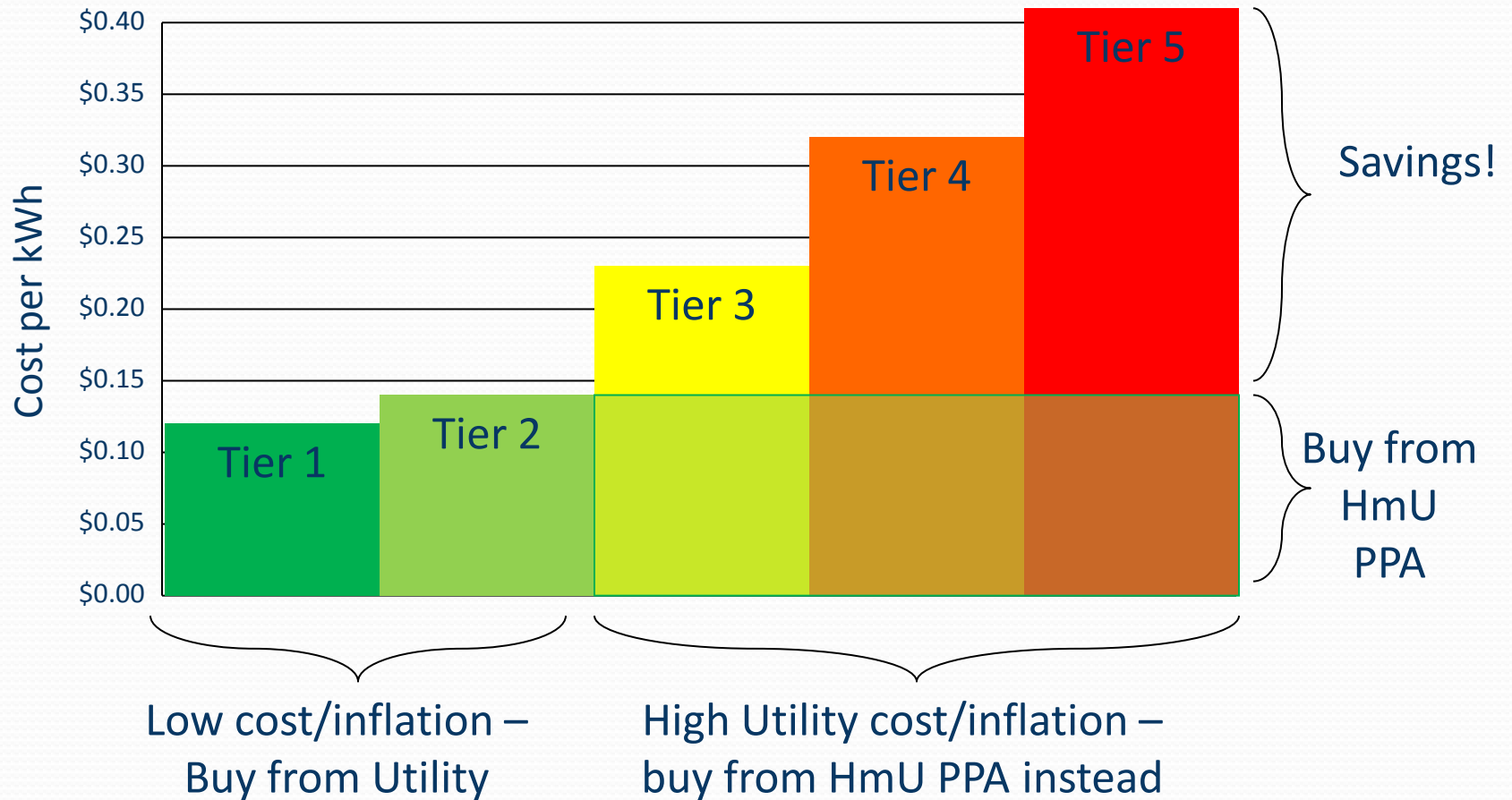
PPA Financing is preferred





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PPAs replace highest cost kWh



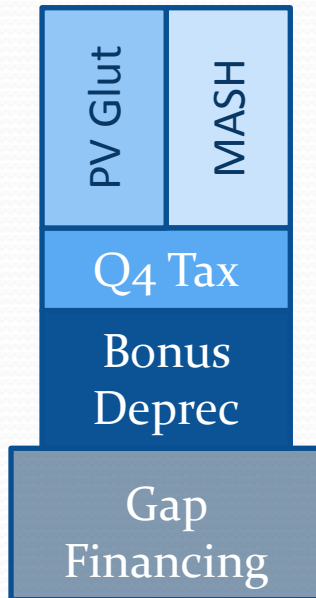


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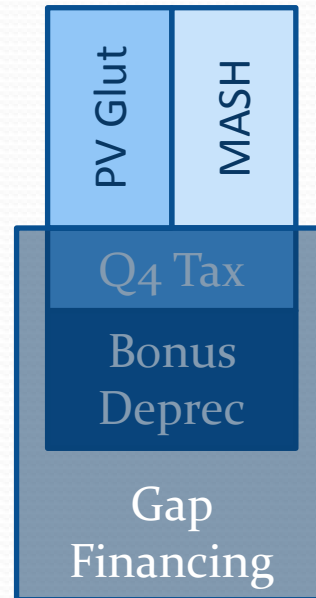
Timing: laggards lose

- 2009 projects benefit from bonus depreciation, tax timing, cheap modules and MASH availability. Projects require ~5 months to the cheapest contracts start July 09.
- As 2010 approaches incentives wane and net project costs rise, regardless of financing vehicle

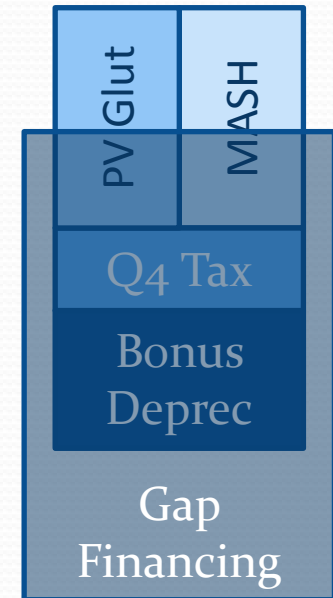
Jul-Dec 09



Aug 09-Jan 10



Q4 09 - 2010





Helio mU Recap

- Incentives: compelling but inadequate
- Financing: PPAs maximize reward/risk
- Avoided Cost: PPAs replace expensive energy
- Timing: Focus on 2009 projects



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Thank You!

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