

Solar Economics in 15 Minutes

Scott Simpson - Invenergy

15 Quick Minutes

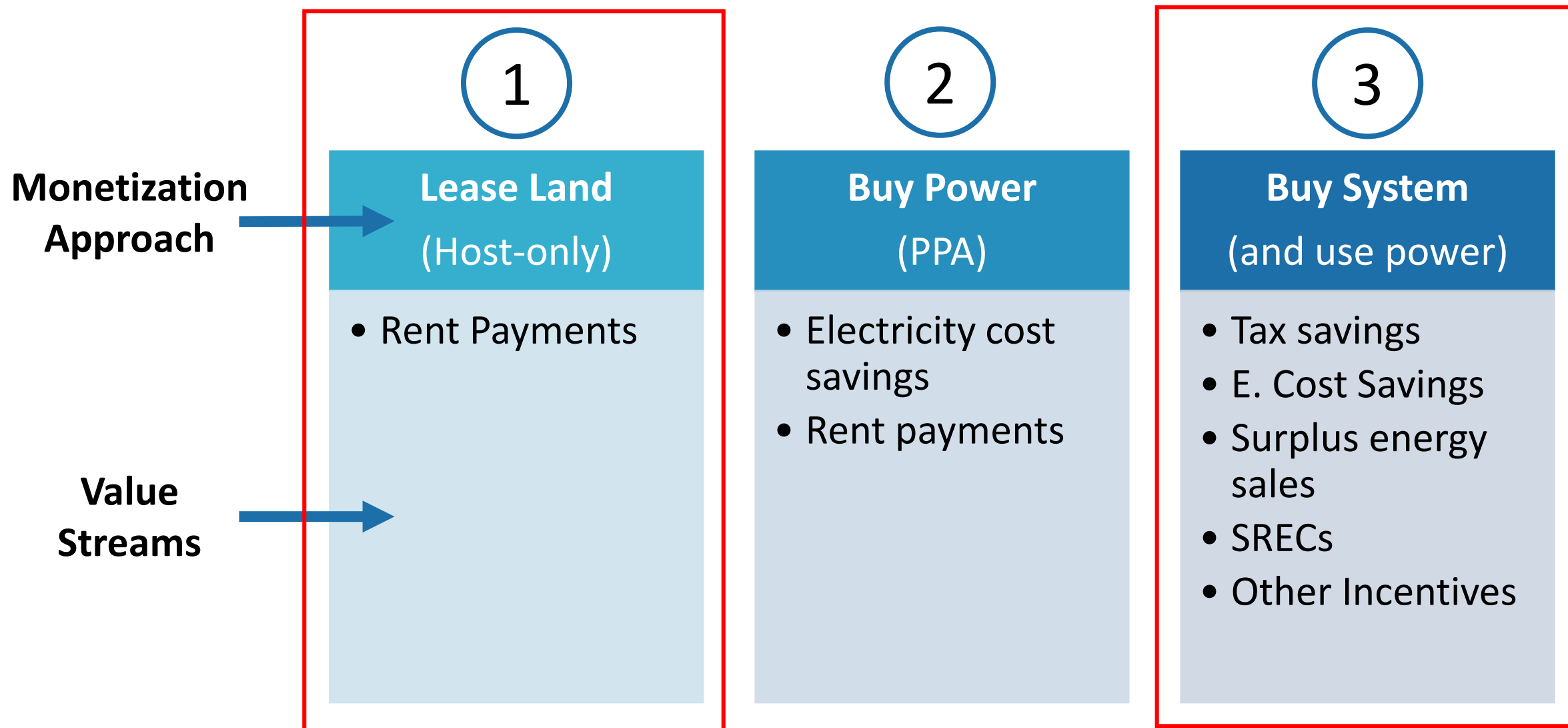
Monetization
Strategy

Value
Drivers

Site-Specific
Costs

Summary

Monetizing your land with solar



A quick word on solar lease rents

Development Phase 3 to 7 years

- Small per acre payment
- Grants the right to perform studies & start construction

Construction Phase ½ to 2 years

- Larger per acre payment compensating for lost land revenue during construction

Operations Phase 30+ years

- Significant per acre payment, escalates with inflation

Tax Savings: The ITC & Depreciation

Federal Investment Tax Credit (ITC)

- 1-time tax credit
 - Requires tax appetite
- 30% of system cost
 - Modules
 - BOS
 - Construction

COD Date (End of...)	2019	2020	2021	2022->
ITC Amount	30%	26%	22%	10%

Accelerated MACRS Depreciation

- 5-Year MACRS
 - 20/32/19.2/11.52/11.52/5.76

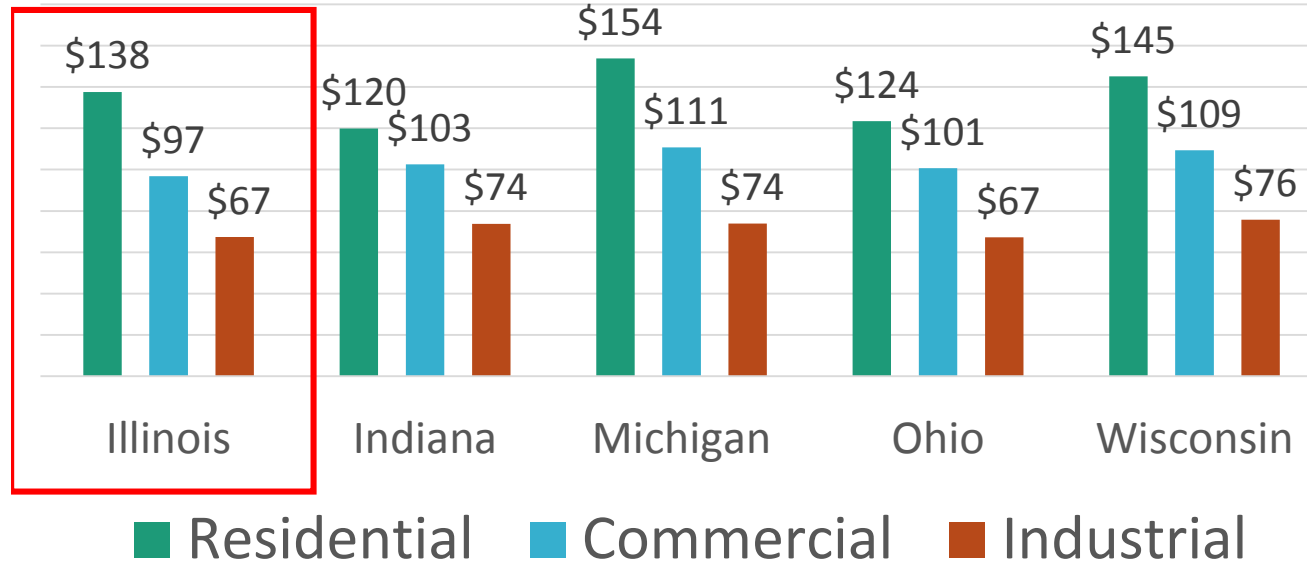
Tax benefits of solar projects often maximized by ownership structures with tax equity partners that “flip” in year 6 or 7

Energy Cost Savings & Surplus Sales

Cost Savings

Surplus Energy

2017 Midwest Electricity Prices (\$/MWhr)



- Net metering can be used on systems up to 2MW
 - **Retail rate** for Non-competitive owners
 - **Avoided cost** for competitive owners
- >2MW systems require either PPA/PURPA contracts or merchant electricity sales

Solar Renewable Energy Credits (SRECS)

- SRECs are sold separately from the electricity
- Value is determined by market supply and demand
- 1 SREC = 1 Mwh of solar electricity
- A 10 MW facility generates ~16,000 SRECs annually
- Facilities must be certified by a state to sell SRECs

Spring 2017 IPA Procurement (IL)

	Up to 2MW Systems
Quantity (SRECS/Year)	9775
Approx. Contract Quantity (#)	48,875
Average Winning Price (\$/SREC)	\$68.56
Total Contract Value	\$3,350,870

Upcoming Fall 2017 IPA Procurement

- 1M SRECS
- 15 Yr. Contracts
- DG, Utility Scale and Brownfield Classes

Spotting a good solar site

Grade & Drainage

<5%

Modifying
drainage adds
\$\$\$

Grid Interconnection

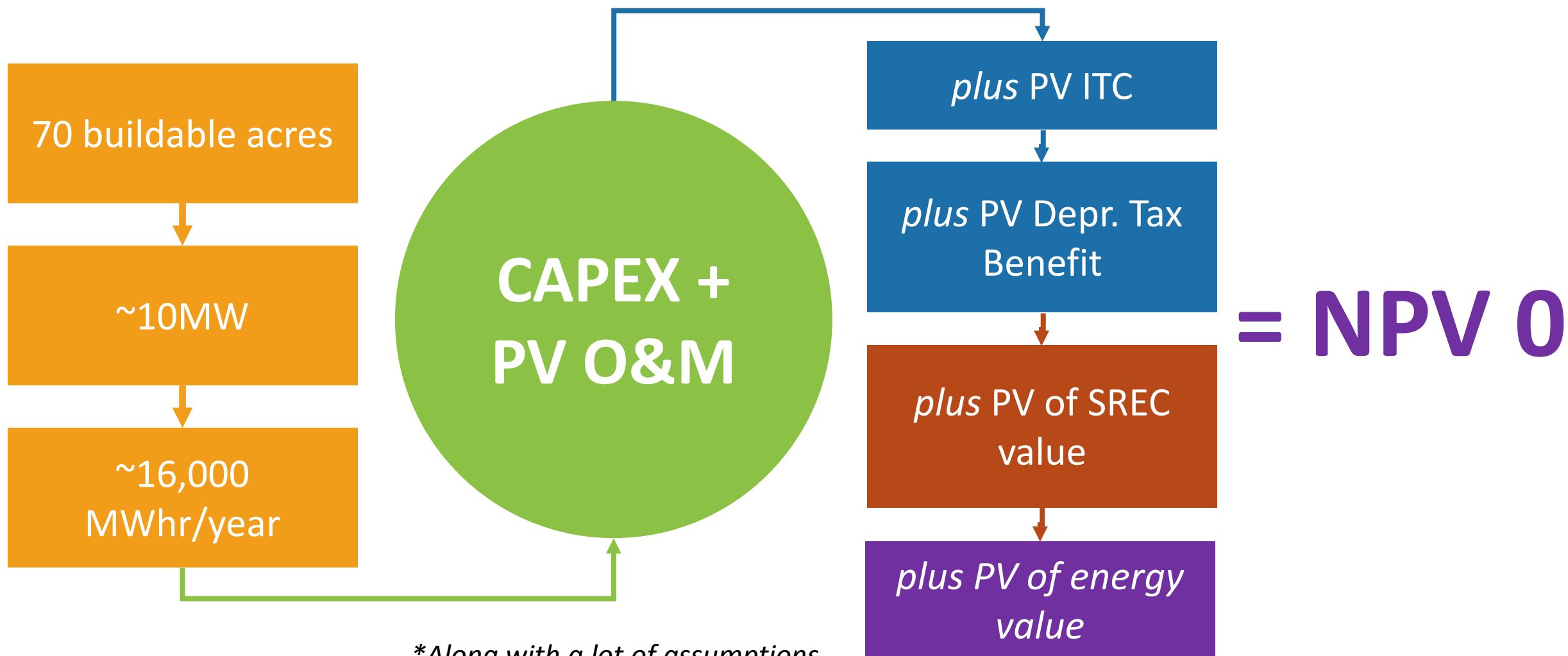
34.5kV if <25MW

Existing tap saves
\$\$\$

Flood-zone Free

Raising modules
adds \$\$\$

A system owners NPV perspective*



*Along with a lot of assumptions



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