

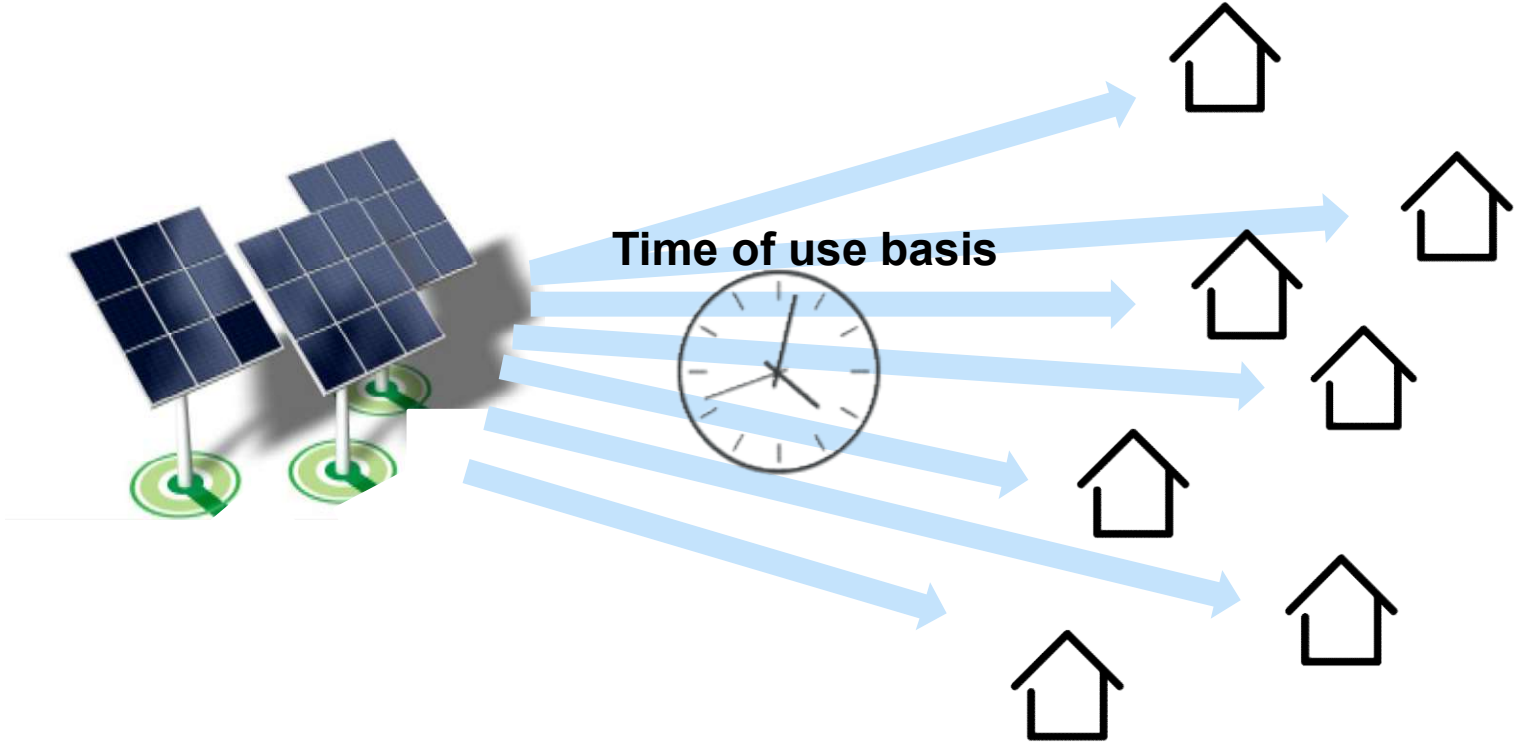
LOCAL ELECTRICITY TRADING FOR A COMMUNITY SOLAR GARDEN

Community Energy Congress, 28th February 18th June 2017

Jay Rutovitz, Institute for Sustainable Futures

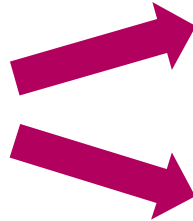


A COMMUNITY SOLAR GARDEN - WHAT IS IT?



WHY A SOLAR GARDEN?

Increases access to
renewable energy



Renters

Households/ businesses
without suitable roofs

Unlocks potential for
new sites

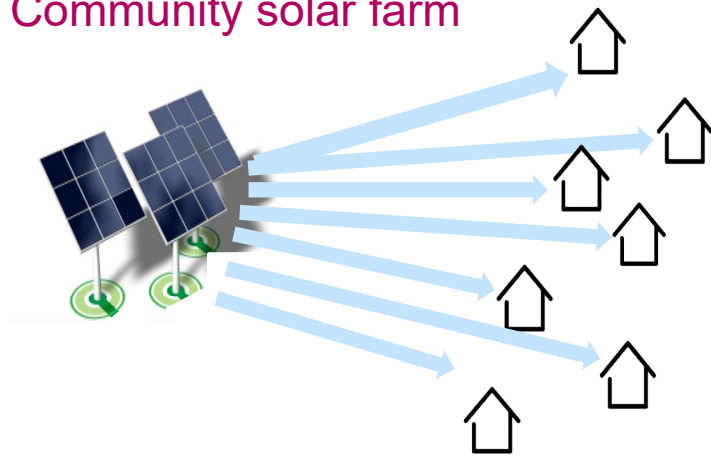


Behind the meter better
economics – but sites limited

Many communities and Councils
would copy the project

HOW DOES THE MONEY WORK?

Community solar farm



① Households/ businesses invest in farm

② Electricity “netted off” according to share of farm

Time of use basis



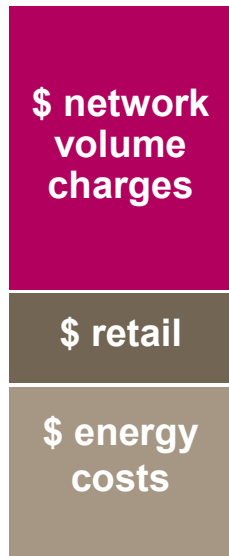
③ If share of solar farm generation greater than house/ business consumption, electricity “exported” and gets FIT

④ Appears as credit on electricity bill

**Under current market rules, network charges will be paid just as they are now
– it is just the ENERGY portion netted off**

THE RETURN ON EACH KWH SOLAR

BEHIND THE METER



LOCAL ELECTRICITY TRADING



LET WITH REDUCED NETWORK CHARGES



The USA Solar Garden model



SOLAR GARDEN BUSINESS CASE - MOIRA AND SWAN HILL

Community owned
stand alone solar farm
“Solar Garden”

+

Electricity “netted off” at
member/owner’s homes according to
their ownership share

Does it stack up at all???

How does it stack up for different
types of customer ?

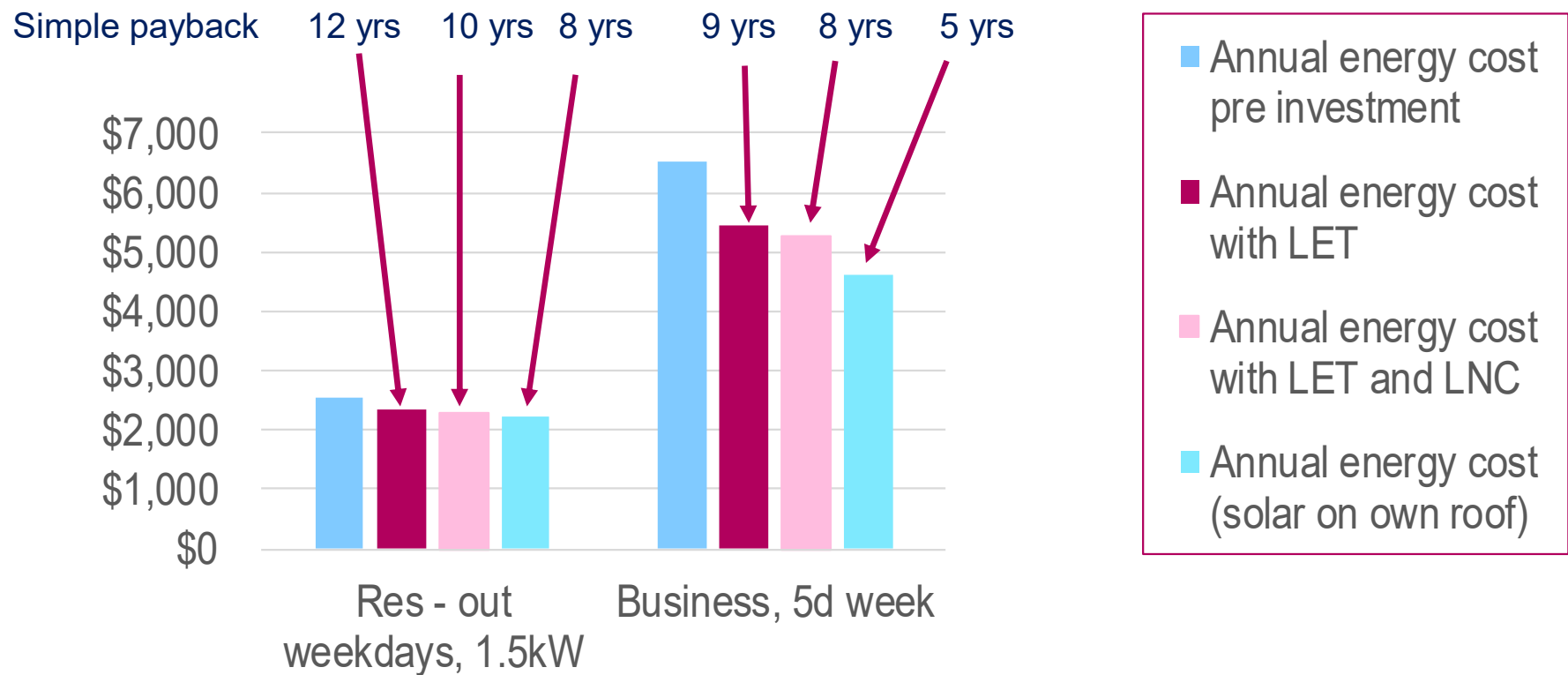
With a Local Network Credit ?

KEY FACTS

- 100kW – 200 kW PV
- Retailer: AGL
- Network: Powercor
- Customer types:
residential (out weekdays,
residential (out weekdays)
different sizes of commercial



ANNUAL ENERGY COST - OUTCOMES BY INVESTOR TYPE



KEY INFLUENCES ON INVESTOR OUTCOMES

Generator cost

What you pay for your energy *without* solar

Behind the meter has better return

Not suitable for large business because energy volume charge is low

The more LET electricity you consume on site -> better payback

Challenging while no reduction in network charges