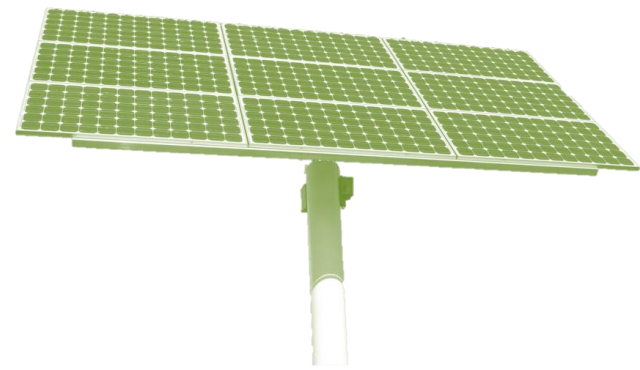




Moving Forward on Community Solar

Michael H. O'Brien

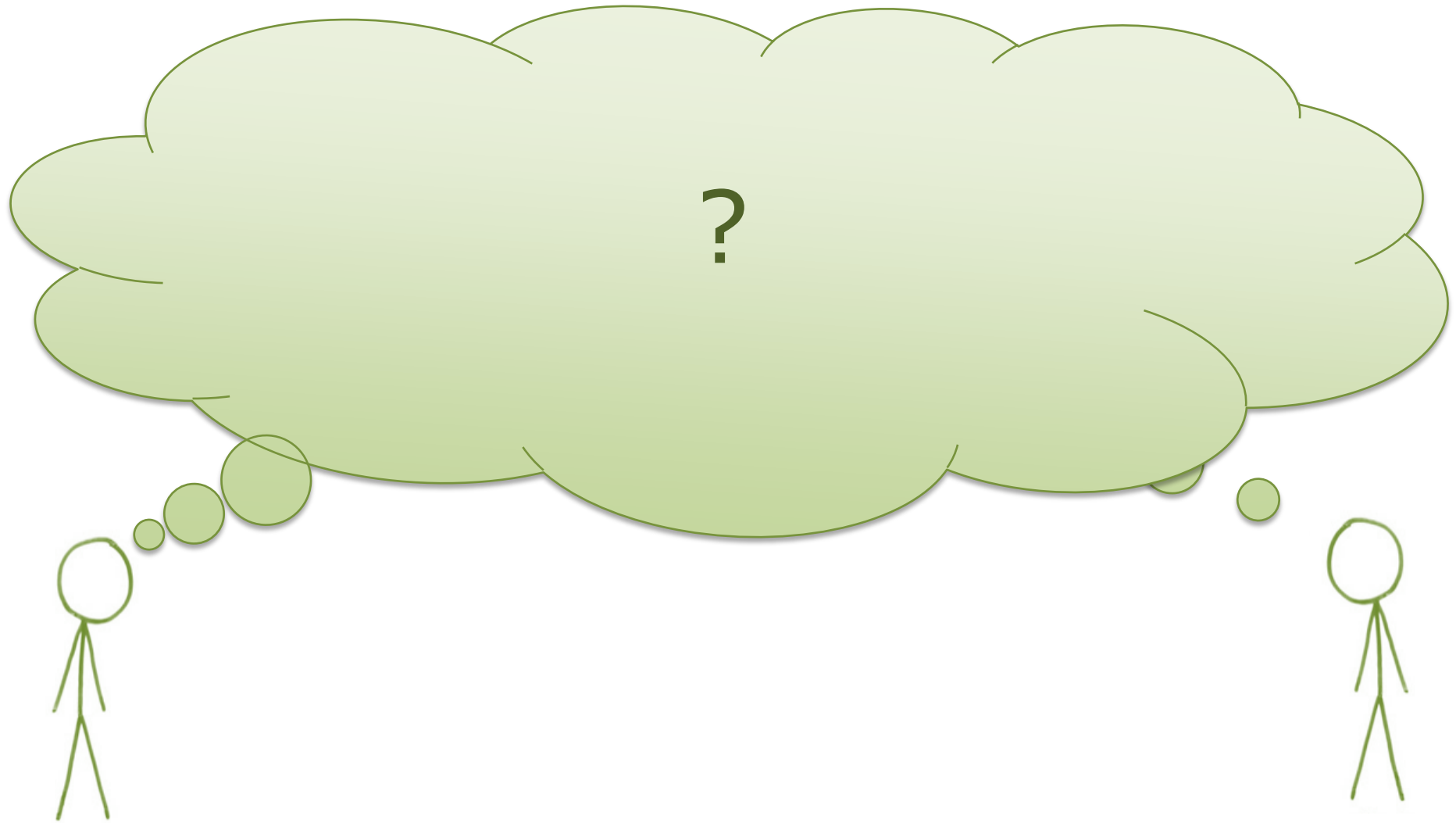
- ☀️ Why?—what is driving community solar forward, where is it working.
- ☀️ Definitions—virtual net-metering, mosaic, solar gardens, crowd-funding.
- ☀️ Value—costs and benefits, to whom, how compensated.
- ☀️ In an ideal world—what would a community solar project look like.
- ☀️ State of the state—what are the challenges in Oregon.



Moving Forward...

- how can we rally support?
- next steps?

Why Community Solar?



Why Community Solar?

Unable to host on own property

Investment opportunity

More local energy

Financing alone is challenging

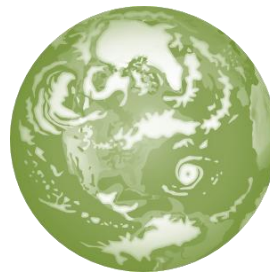
Economies of scale

Increased energy independence

Don't want to host on own property

Lower utility bills

Greening energy supply



Single Customer Solar Definitions

Solar Project Investments

(e.g. "Solarize programs)

- Residents get together to buy solar panels at bulk discount.
- Installed on each of their homes.



Virtual Net-Metering

(e.g. aggregate net-metering)

- one solar system, multiple meters, one customer (bill).
- customers with multiple facilities and a good solar site.
- campuses, municipalities, farms.



Community Solar Definitions

Community shared solar—one solar project provides power or economic benefits to multiple customers.

Solar Project Investments

(e.g. solar Mosaic model)

- individual investors fund commercial solar projects.
- no VNM, no utilities, more like a bond.
- receive return on investment.

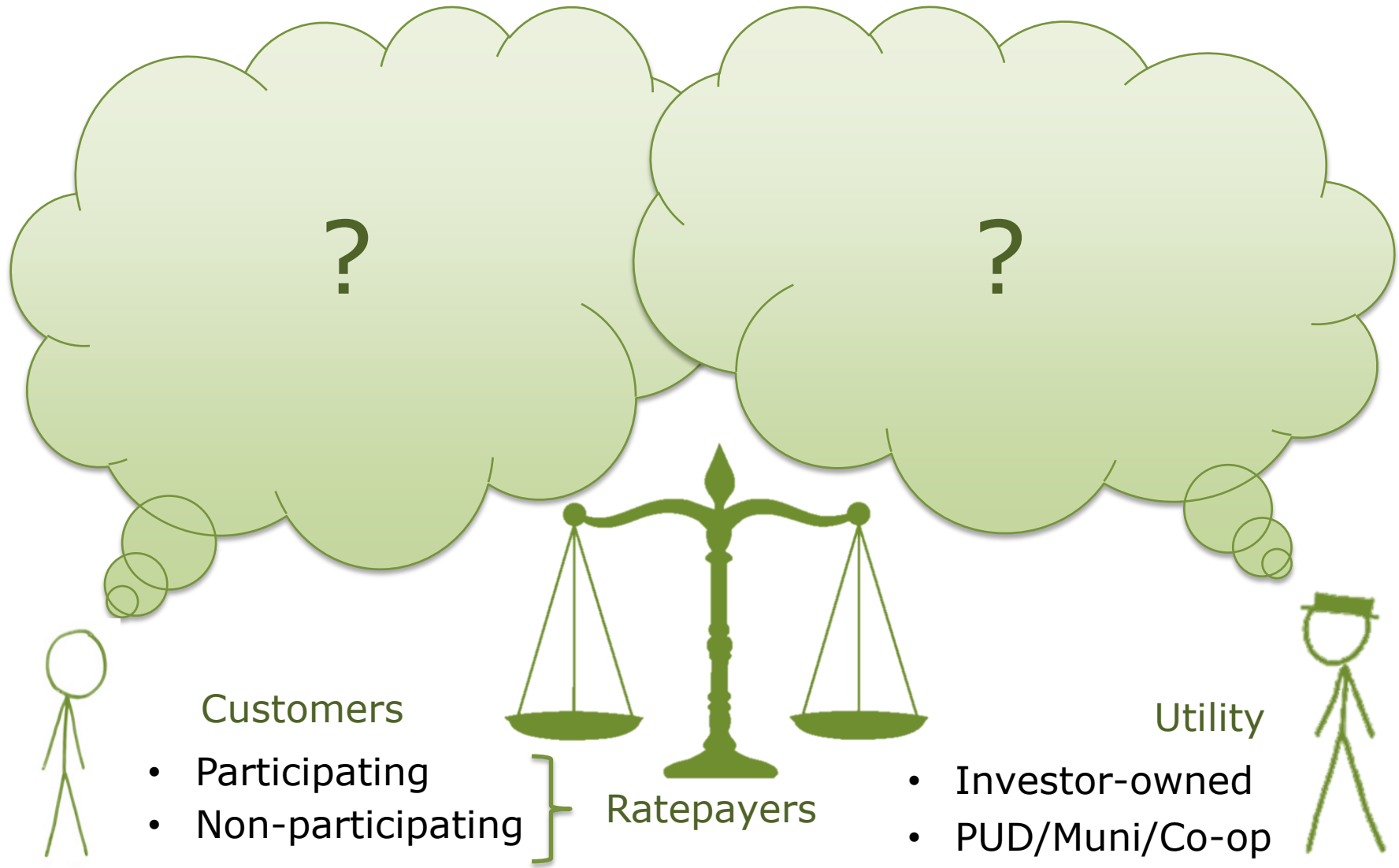


Virtual Net Metering

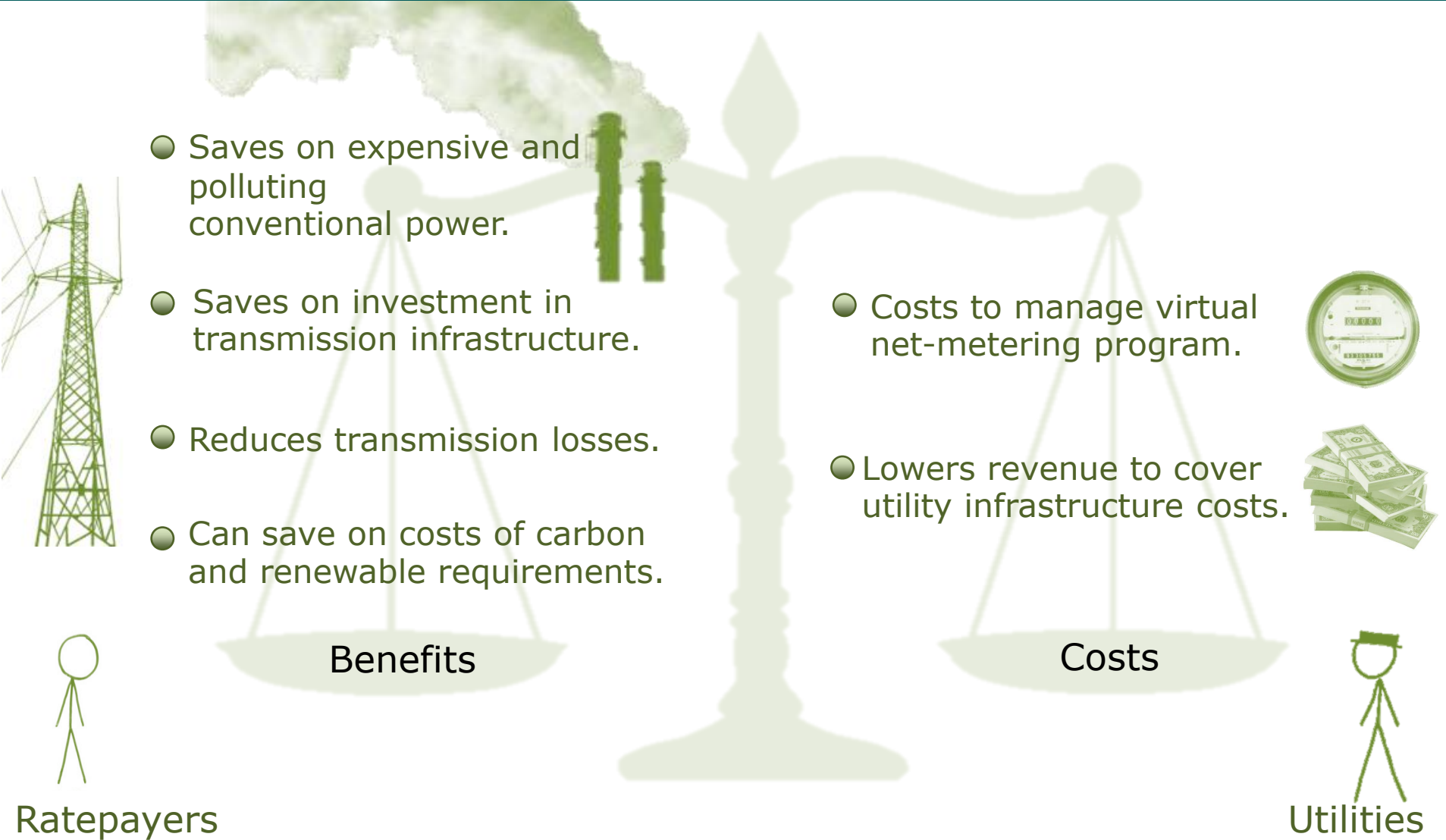
(aka community net-metering)

- solar energy credited to bills of offsite subscribers.
- one solar system, multiple meters, multiple customers, multiple bills.
- if you cannot put solar on your own property.





Costs and Benefits (VNM)



Variations on Community Solar

?

Most like net-metering/
on-site generation

Least like net-metering/
on-site generation

Variations on Community Solar



Most like on-site

Least like on-site



Community solar with off-site virtual net-metering

- participants receive monthly compensation on their electricity bill proportional to their share of generation.

Solar Pioneer (Ashland)

- customers can purchase a share in utility's local solar project, bills will be credited for amount generated.

Community Solar Gardens (Colorado)

- utility customers can interests in a PV system not located on their property, and have their share offset their bill.

Community Solar Shares (SMUD)

- utility buys solar energy from a local system installed by a vendor, resells energy to participants, lowers bills.

Solar Mosaic

- crowdfunding investment model, typically local facility, no virtual net-metering or utility involvement, like a bond.

860-039-0065

Aggregation of Meters for Net Metering



...virtual net metering not allowed.

- (1) For the purpose of measuring electricity usage under the net metering program, a public utility must, upon request from a customer-generator, **aggregate for billing purposes the meter that is physically attached to the net metering facility** (“designated meter”) with one or more meters (“aggregated meter”) in the manner set out in this rule. This rule is mandatory upon the public utility only when:
- (a) The aggregated meters are **located on the customer-generator’s premises** or a property that is contiguous to such premises;
 - (b) The electricity recorded by the designated meter and any aggregated meters is for the customer-generator’s requirements, and;
 - (c) The designated meter and the **aggregated meters are served by the same primary feeder** at the time of application.



“Shares”, “Return on investment”, attract the interest of the State Securities regulators.



- ☀️ (Continue) Advocating for a change in the laws to allow virtual NM.



- ☀️ Lobby local public utility to set up a community project.



- ☀️ Work within existing laws on imaginative solutions to community solar.





Moving Forward on Community Solar

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