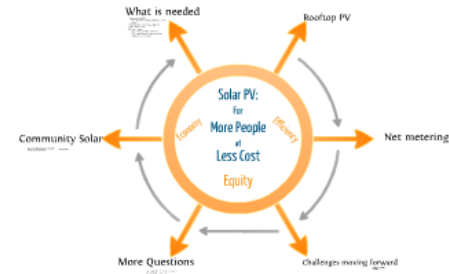




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chinmayakulkarni@gmail.com



Making Rooftop PV Affordable and Effective



The RTPV Opportunity

The RTPV challenge

The greatest good for the greatest number

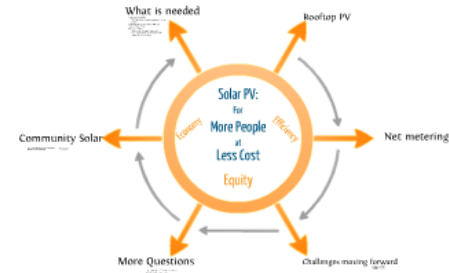
- Greater area, expansion of capacity
- Reduced T&D losses
- Zero Land Cost
- Batteries Eliminated:
 - ROI
 - EROI and embodied energy (-170Wh/Wh)
 - Environmental Benefits

- Affordability
- Penetration
- Public Participation



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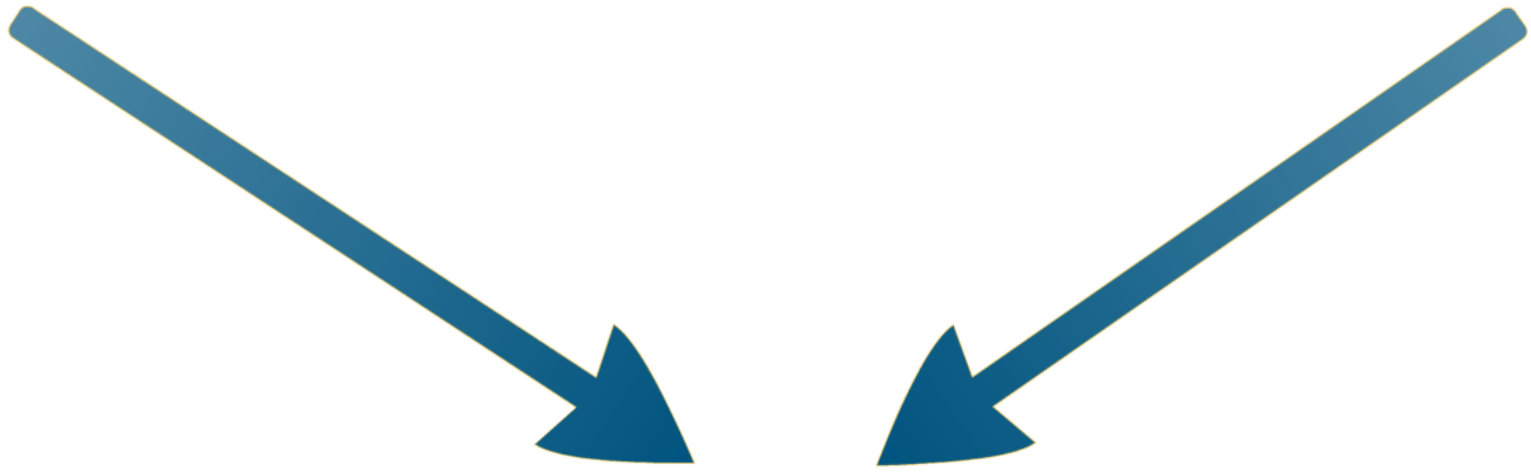
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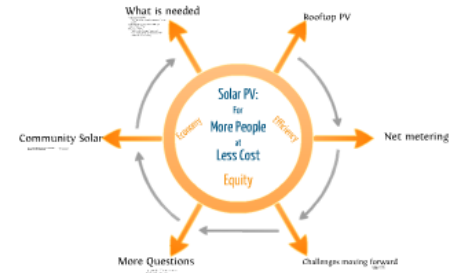
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What is needed

- Enforcement of RPOs
- Fulfilled either through preferential tariff or RTO
- Processes for smaller size (10kW) and interactive facilities
- Technical issues
 - Load dispatch issues "must-run"
 - Clear protocol for pre-empting safety issues such as islanding

Rooftop PV

Solar PV:
For
More People
at
Less Cost

Economy

Efficiency

Equity

Net metering

Community Solar

More Questions

- Equity and public participation
- Misaligned Incentives
- Arbitrary/Imprecise prices

Challenges moving forward

Isolation, Generalized
Spending

Rooftop PV



Net metering

- Widely Imple
- Once in plac
- Well docum

- Widely Implemented
- Once in place, low overheads
- Well documented advantages



Challenges moving forward

Solution, Generally
Speaking:

Fewer Failure Points!

Shadows of familiar problems!

- Governance, M&V
- Complexity and cost of physical infrastructure
- Inefficiencies due to small unit size

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Technical
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Challenges moving forward

Solarium, Germany
Speaking



More Questions

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Community Solar

Community investment and shareholding
Benefits as per shareholding

The Advantages

Investment opportunities
Simple, defined returns for all
Full participation and shareholding
A wide of diversity for the same value
Flexible or existing framework
Technically and economically
Proven models for implementation

O m m m u

Community investment and shareholding
Benefits as per shareholding

The Advantages

Sized advantageously

Equity - adequate returns for all

Public participation and stakeholding

A unit of electricity has the same value

Possible in existing framework

Technically and economically

attractive models for implementation

What is needed

- Enforcement of RPOs
 - Fulfilled either through preferential tariff or REC
- Provision for smaller size (>75kW) grid-interactive facilities
- Technical issues: ,
 - Load dispatch issues: "must-run"
 - Clear protocol for pre-empting safety issues such as islanding



What is needed

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- Fulfilled either through preferential tariff or RTO
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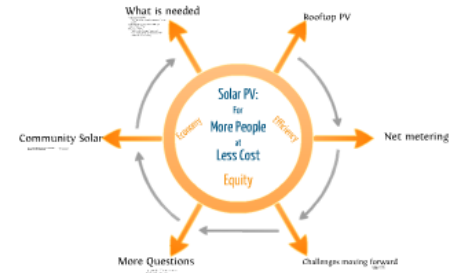
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