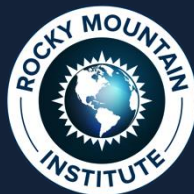




EMPOWERING LOW-INCOME HOUSEHOLDS IN A CLEAN ENERGY FUTURE

Jules Kortenhorst | May 18

UN Foundation - Rexel Foundation - Clean Energy Solutions Center Webinar



Transforming global energy use to create a clean, prosperous, and secure low-carbon future.

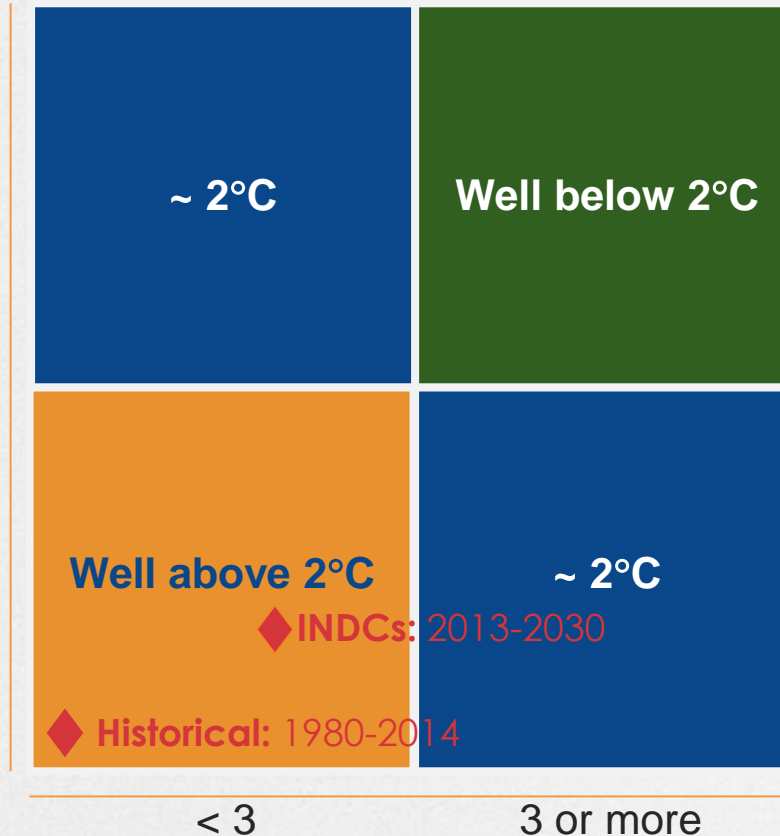
ENERGY PRODUCTIVITY & THE SHARE OF ZERO-CARBON ENERGY WILL DRIVE OVERALL SYSTEM CHANGE

Global primary energy demand, 2012-2050

Increase in share of zero-carbon energy
% points p.a.

1 or more

< 1



Improvement in energy productivity
% p.a.

Footnote: We include here renewables, nuclear, biomass and fossil fuels if and when their use can be decarbonized through carbon capture and use or storage (CCS/CCU). However, if a large share of the increase is from the latter, more than 1% point is required since this does not reduce emissions to zero completely

Source: Enerdata (2015), Historic actuals

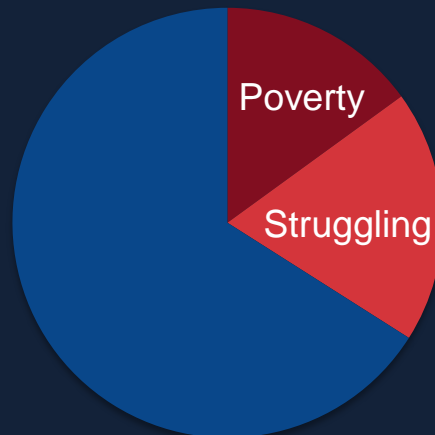




LOW-INCOME OPTIONS?

What options do low-income households have to participate in an efficient, clean energy economy?

Percentage of US Population
Illustrative only



\$ 24,300
family of four

THIS PROBLEM REQUIRES US TO RETHINK HOW WE COLLABORATE

Optimizing for short-term bill reductions	Optimizing for long-term energy independence
Working on behalf of low-income end users	Working with low-income end users, at the speed of inclusion
Multi-year master planning	Experimentation, nimble course-corrects
Top-down solutions	Bottom-up innovations





e-LAB LEAP

RMI is convening a social change lab in NY that strengthens the capacity of local partners to conceive, launch, and execute collaborative low-income focused solutions.

- 5 participant-led initiatives
- Support for innovative business models that serve LI



EFFICIENCY WORKS

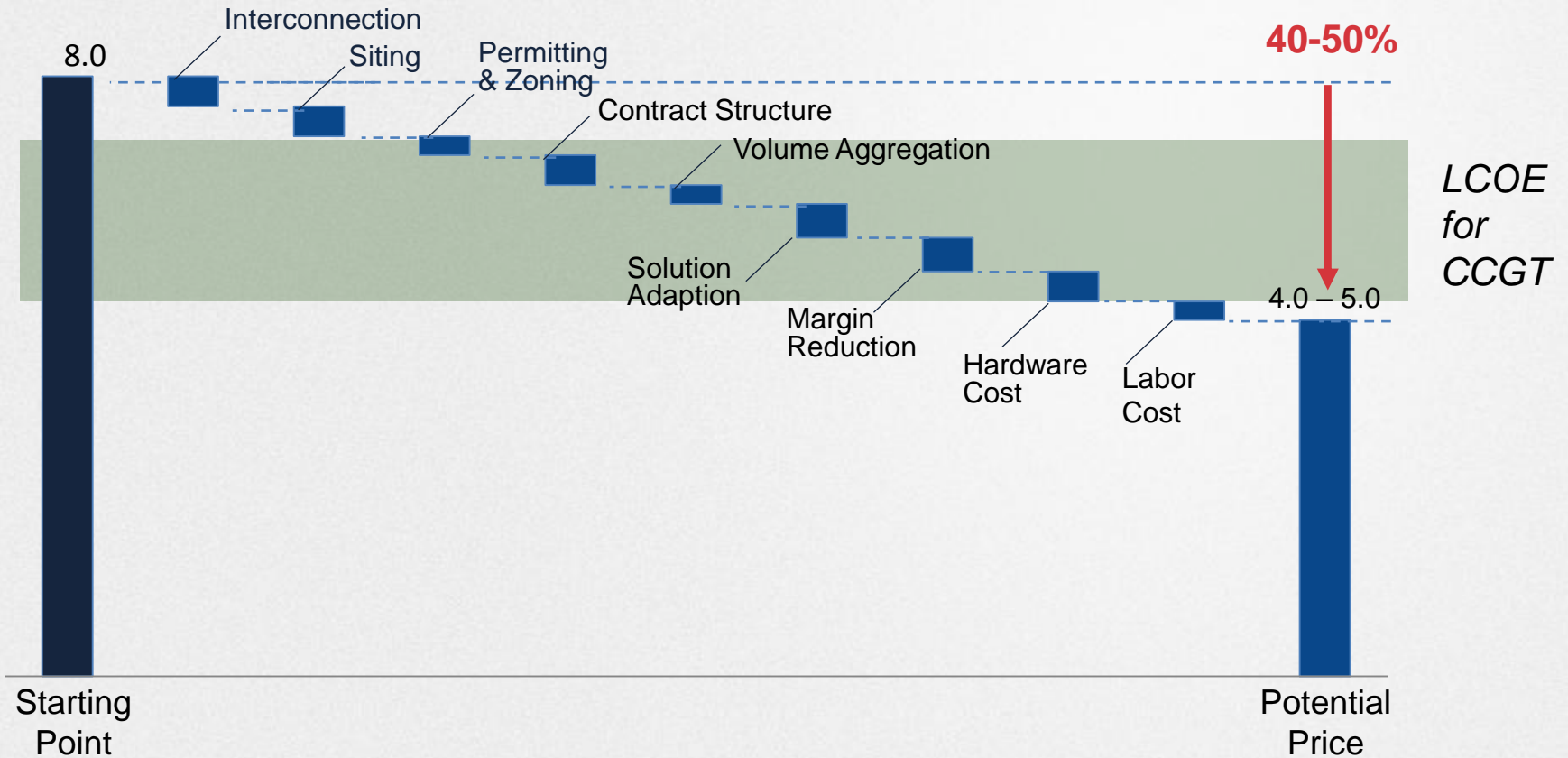
Neighborhood pilot

RMI is partnered with Fort Collins Utilities to design and support the pilot of a new utility business model.

- Utility-led, opt-out, on-bill tariff program for efficiency and solar.
- Participants benefit without incurring debt, at bill-neutral or better
- Utility can realize net positive revenues
- Supports community in its aggressive goals to reduce carbon emissions by 80% by 2030.

SHINE: REDUCING COSTS FOR COMMUNITY SOLAR

Community-Scale Solar Cost Reduction Potential
USc / kWh, PPA price



Source: RMI Analysis



RESIDENTIAL ENERGY+

Together, we hold the key to better homes

RMI is co-developing market interventions to make home energy upgrades understandable and easier to adopt—enabling families to live in better homes with lower monthly costs

- FHFA's Duty to Serve Rule
- Near Net Zero Energy Retrofits at Scale
- Scaling Residential Property Assessed Clean Energy (PACE) Financing

RWANDA LIGHTING ENERGY EFFICIENCY PROGRAM

RMI has developed for the Rwandan government in an LED lighting switch-out program that can save 20% of peak power demand and \$20–25 Million per year in diesel cost

CURRENT SITUATION RWANDA

- Utility is struggling financially
 - Dependent on high cost diesel power (30% of generation)
 - Has power deficit causing load shedding of 15–20%
- Lighting contributes more than 30% of peak load



PROPOSED EFFICIENT FUTURE

- 100% replacement of all light bulbs in the country with LEDs
- Peak savings of 30 MW (20% of peak)
- Total cost of \$20 Million (\$0.6/W or \$0.02/kWh)
- Diesel savings of \$20–\$25 Million/year

