



Key issues in Mini Grid Regulation

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Learning Event on Upscaling
Mini Grids for Low Cost and
Timely Access to Electricity

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Key issues in mini-grid regulation

+ Jurisdiction of electricity regulatory authority

- Licensing and registration
- Tariff setting
- Safety & quality of service
- Rules that address what happens if the main grid reaches the mini-grid

+ Jurisdiction of other regulators

- Environmental permitting
- Import and customs
- Business registration
- Land and resource rights

Licensing and registration

- + **Licensing:** a government-granted right to conduct a business
 - Form of consumer protection
 - Protects legitimate developers
 - However... administrative burden both for the regulator and for developers.
- + **Registration:** simply informing regulator of existence

Licensing and registration

- + Should small projects be exempt from licensing?**
 - What is “small”?
- + Should there be provisional licenses to allow developers to secure site to conduct studies?**

Retail tariffs

+ Costs for mini-grid power...

- are generally higher than urban main grid power
- vary widely depending on the technology, scale and location

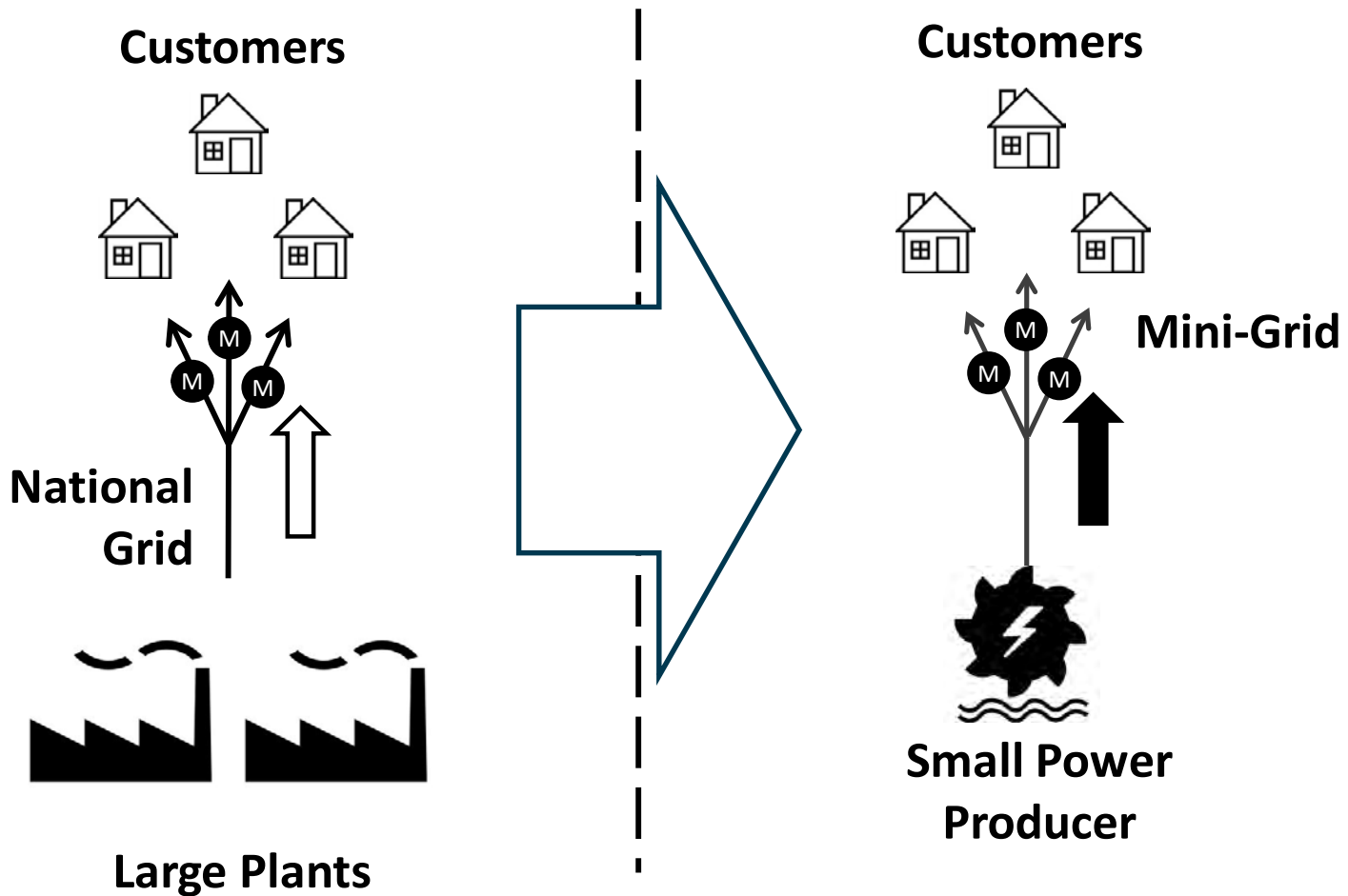
+ Should regulators fix retail tariffs? Or should they be determined by mutual agreement with communities?

+ Should mini-grids charge national uniform tariffs?

Safety & Quality of service

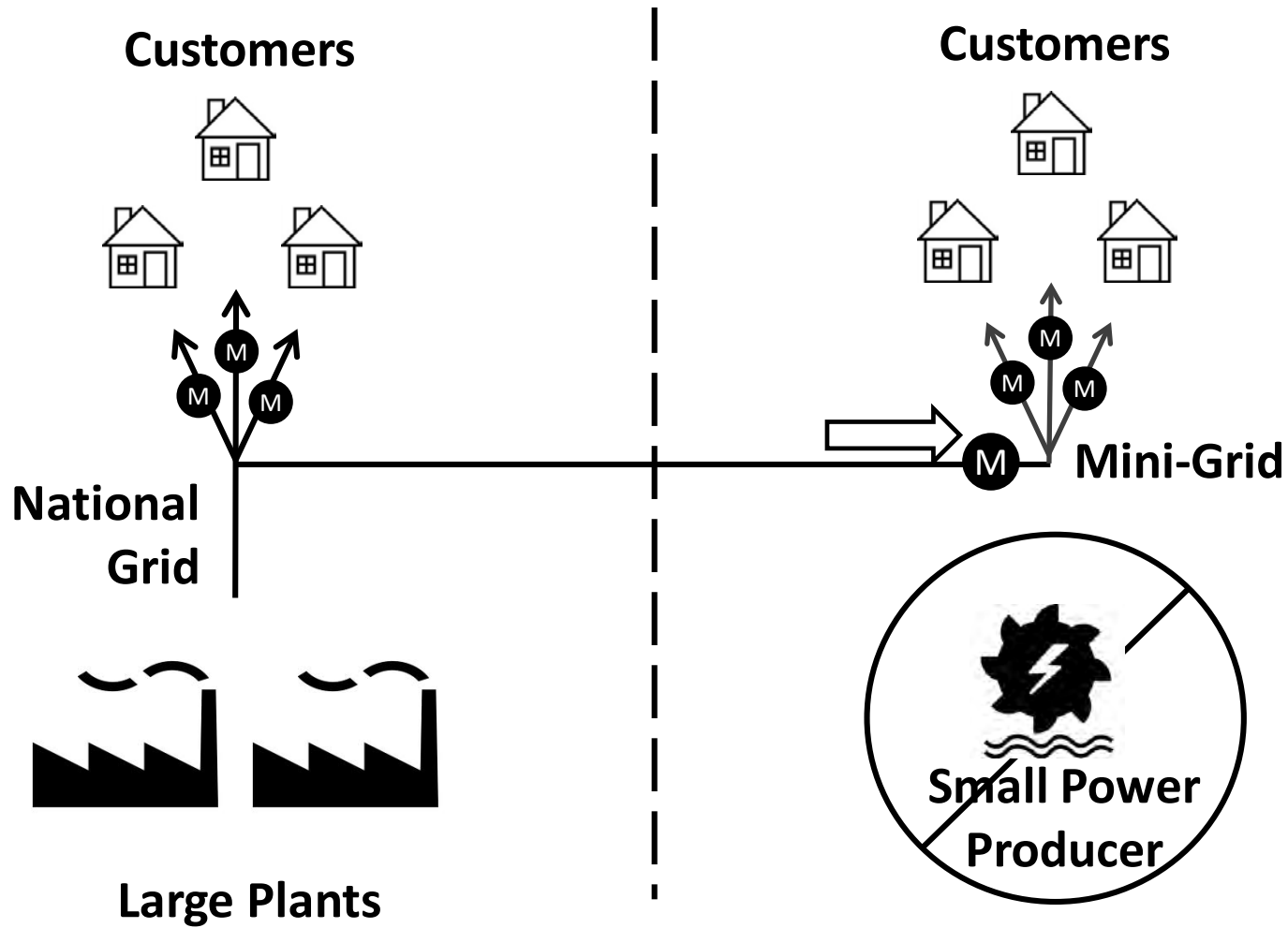
- + **Safety:** what is the appropriate balance between protecting consumers on the one hand, and avoiding imposing restrictions that limit innovation on the other?
- + **Quality / reliability:** What is the trade-off between cost and power quality?

Arrival of the main grid



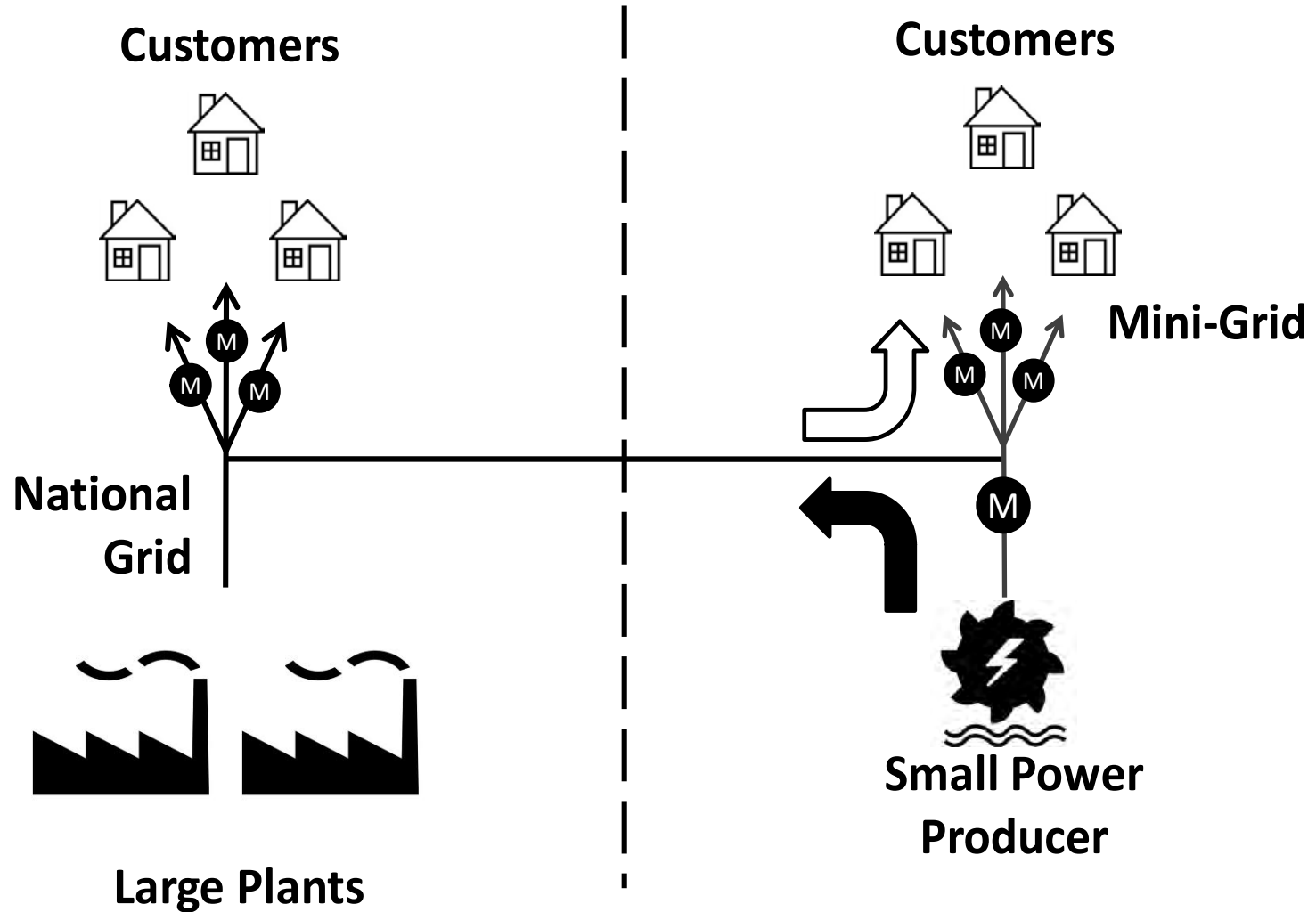
Key:  = power from utility  = power from SPP  = meter

Small Power Distributor (SPD)



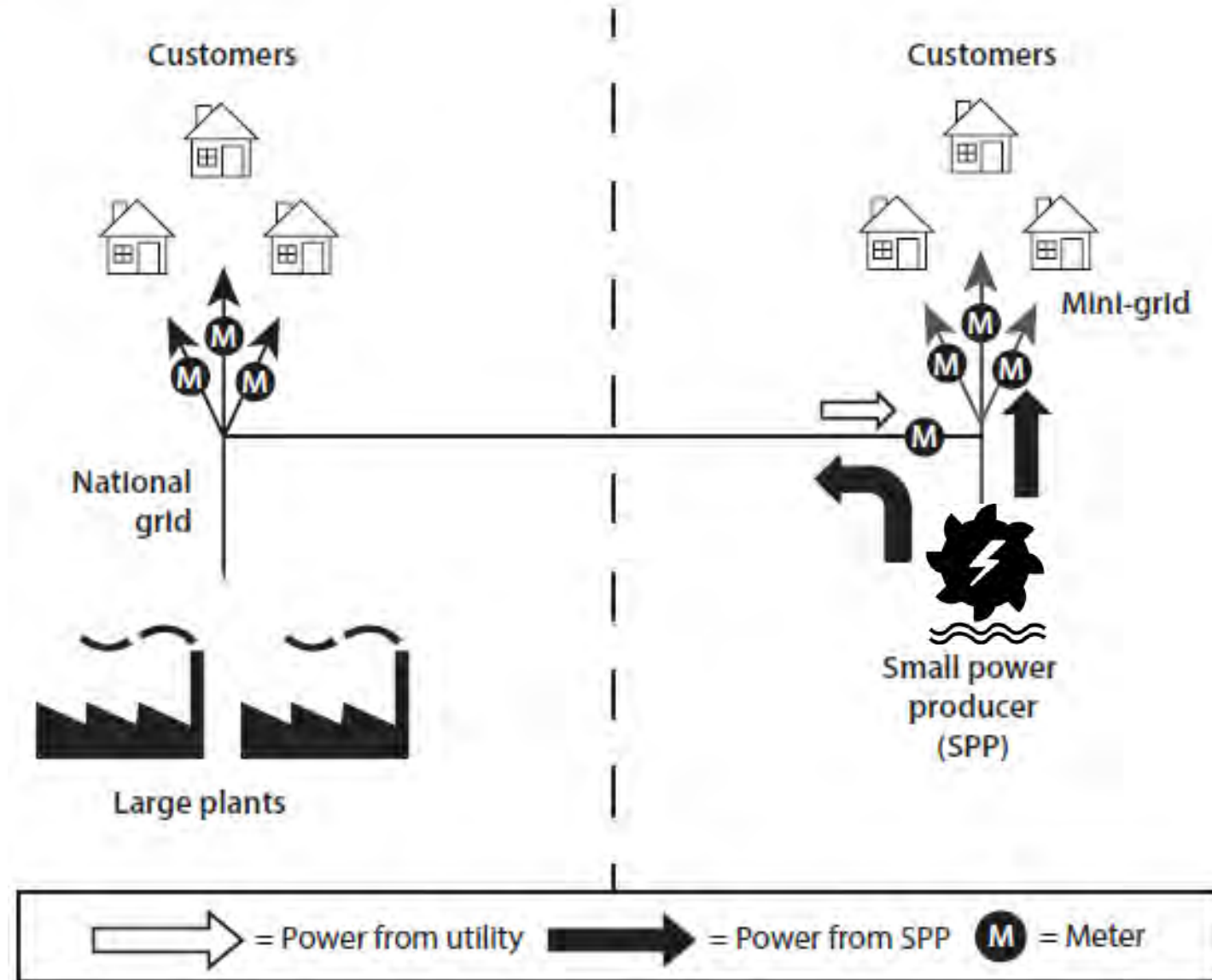
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Small Power Producer (SPP)

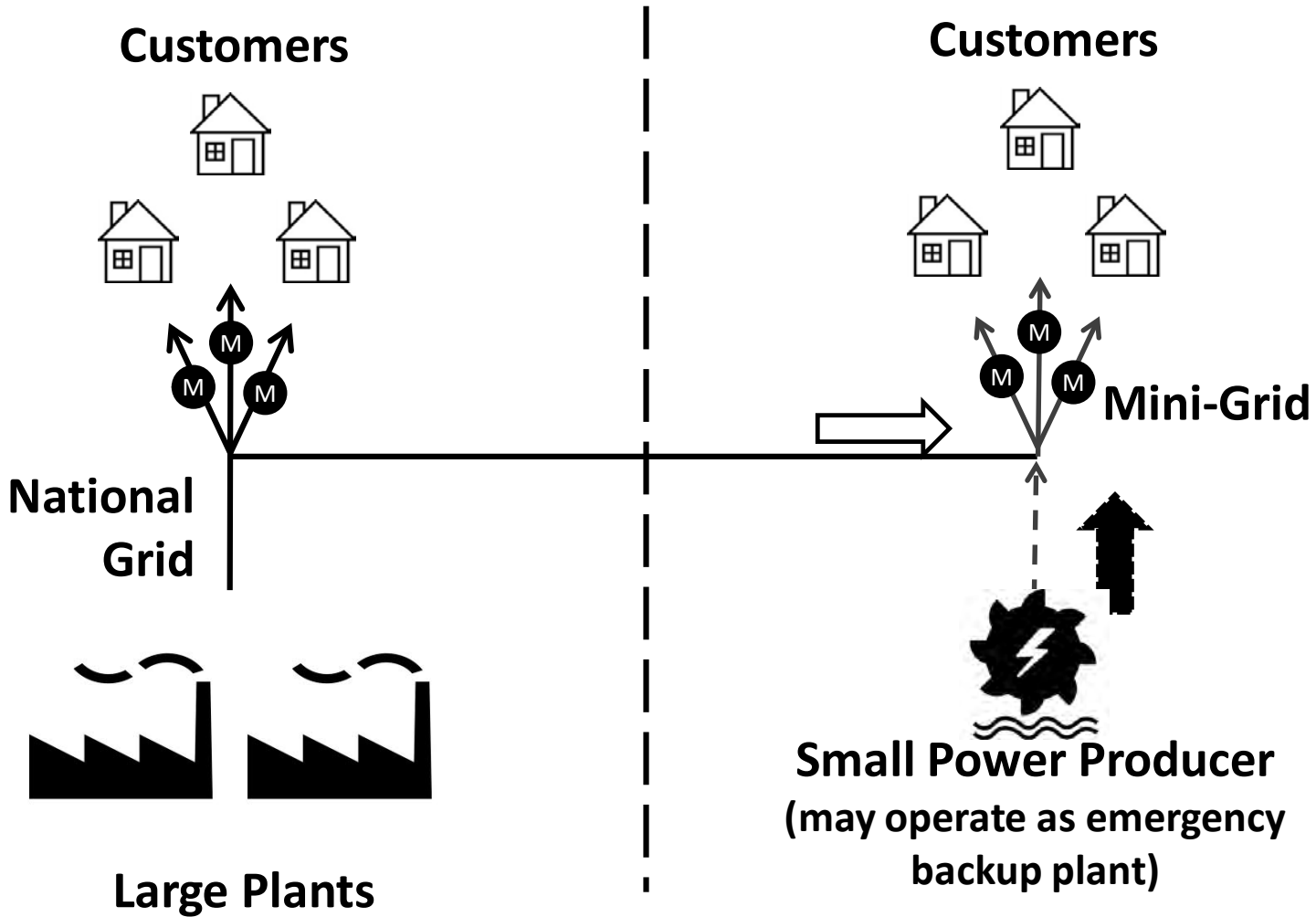


Key: = power from utility = power from SPP = meter

Both SPP and SPD

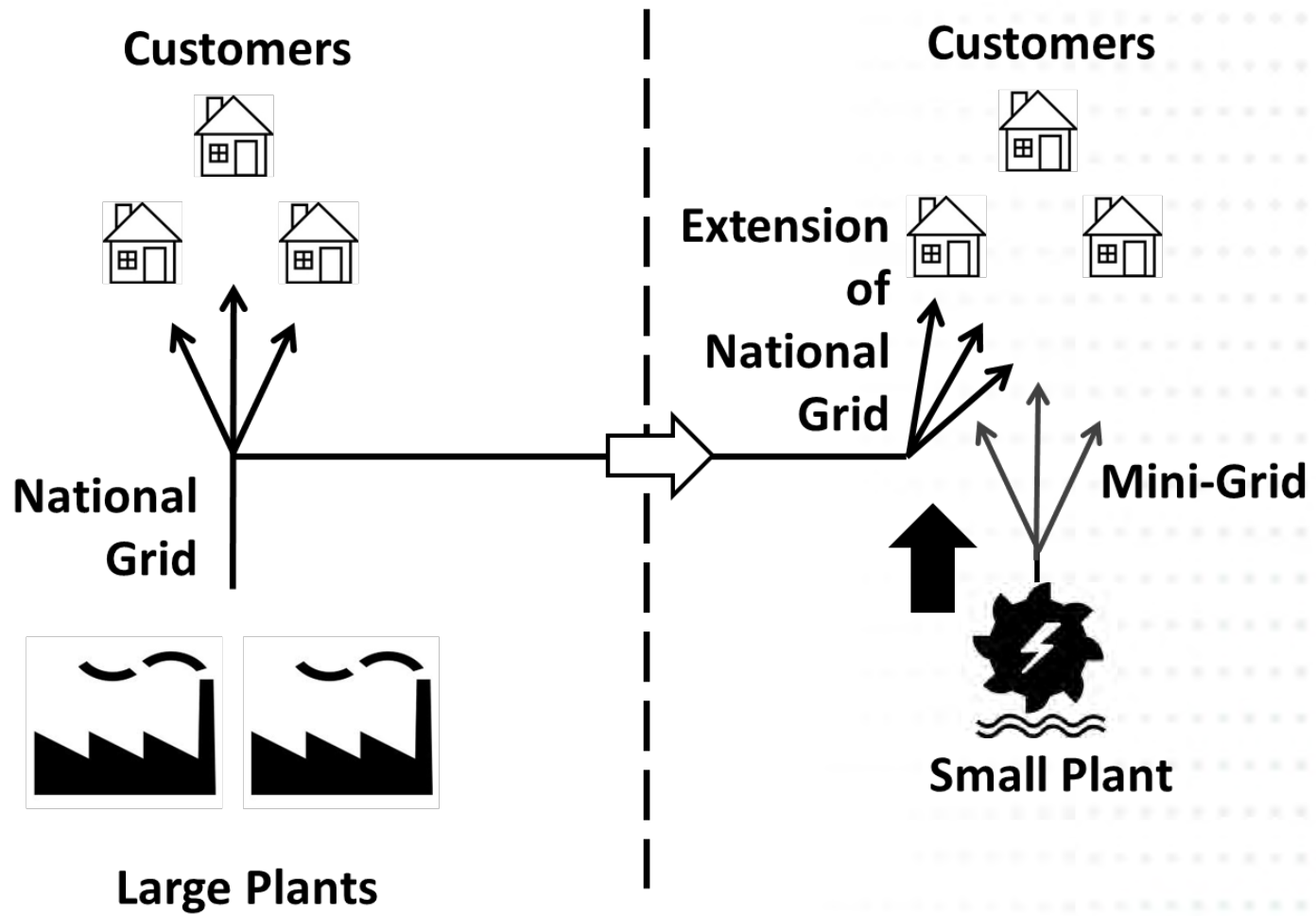


Buyout

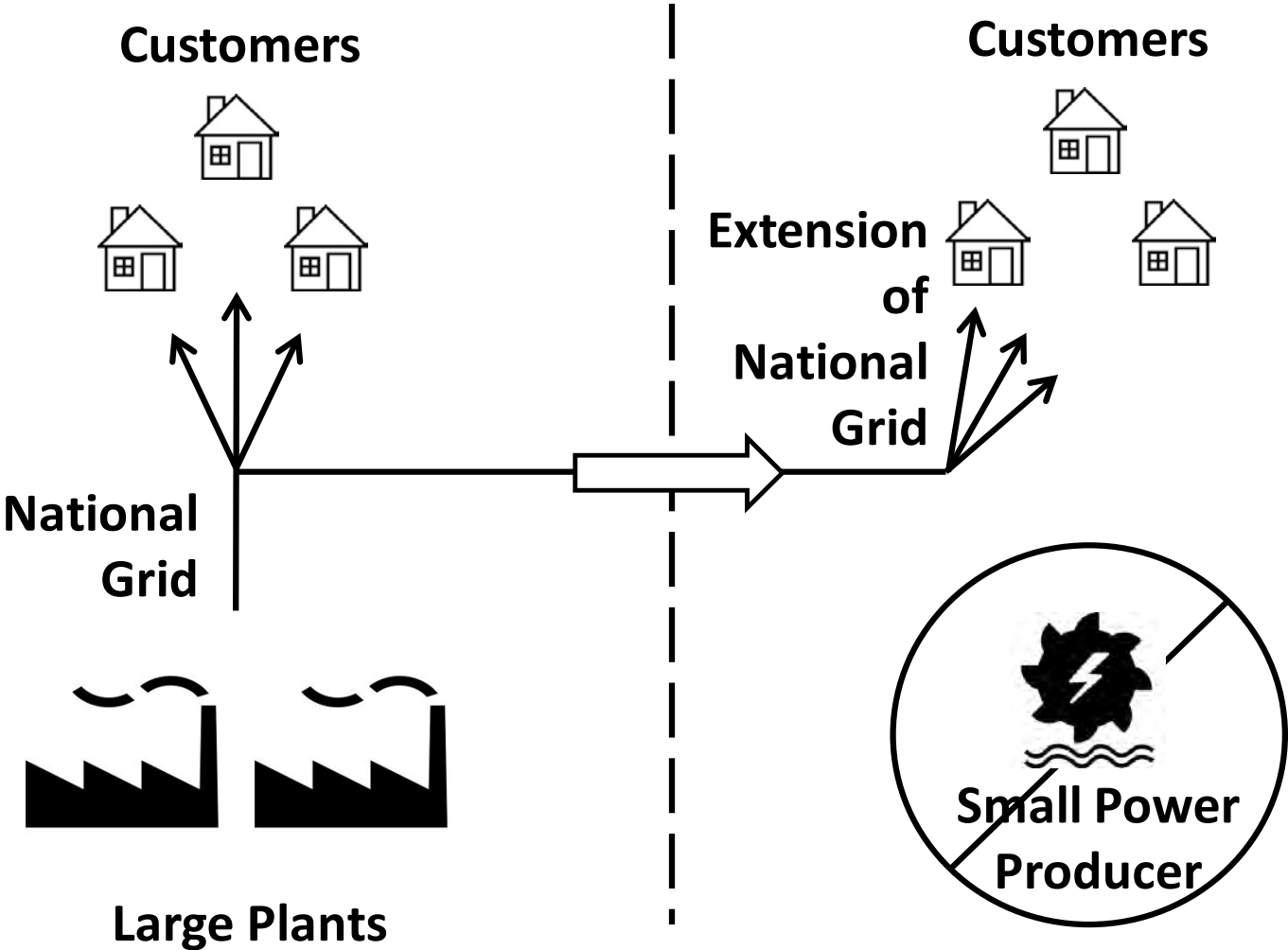


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Co-existence



Assets abandoned



MINI-GRIDS AND ARRIVAL OF THE MAIN GRID

LESSONS FROM CAMBODIA, SRI LANKA, AND INDONESIA



Hardcopy here at conference



DIRECTIONS IN DEVELOPMENT
Energy and Mining

From the Bottom Up

*How Small Power Producers and
Mini-Grids Can Deliver Electrification and
Renewable Energy in Africa*

Bernard Tenenbaum, Chris Greacen,
Tilak Siyambalapatiya, and James Knuckles

<http://hdl.handle.net/10986/16571>