Offgrid Power: Intro Day 1

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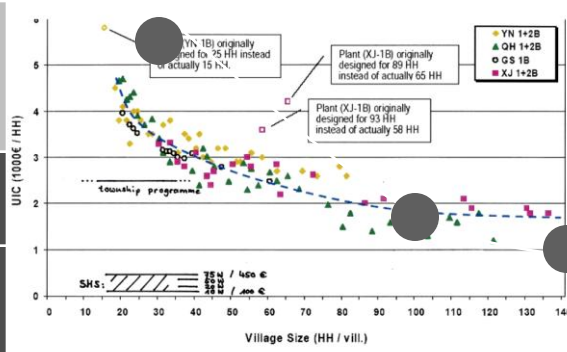
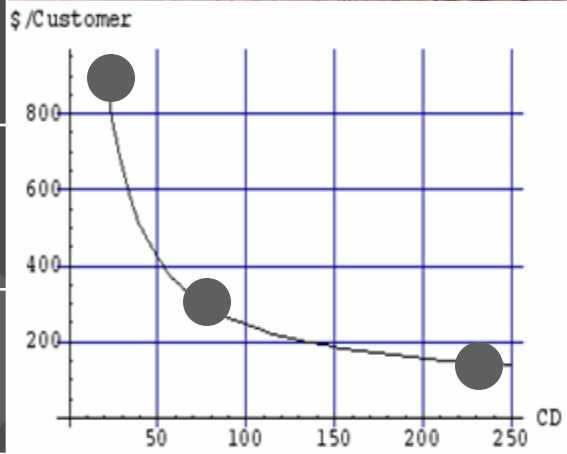
Offgrid Power – Why?

Typical HH: **5 $/m** – Kerosene: 5-10 l/m at **0,1-1 $/klmh** - Grid: **10-100 kWh/m**

BAHIA	Grid extension costs per consumer in US$					
	Columns: Distance from existing grid in km					
Posts per consumer	0-1	>1 – 5	> 5 – 10	> 10 – 20	> 20-50	> 50
≤ 0.5	**105**	**145**	**202**			
> 0.5 – 1	**322**	**324**	**357**	**373**		
> 1.1 – 2	**632**	**642**	**646**	**711**		
> 2.1 – 4	**1.179**	**1.184**	**1.208**	**1.325**		
> 4	**4.166**	**4.343**	**4.763**	**6.530**	**6.818**	**28.219**

Source: ESMAP 2006



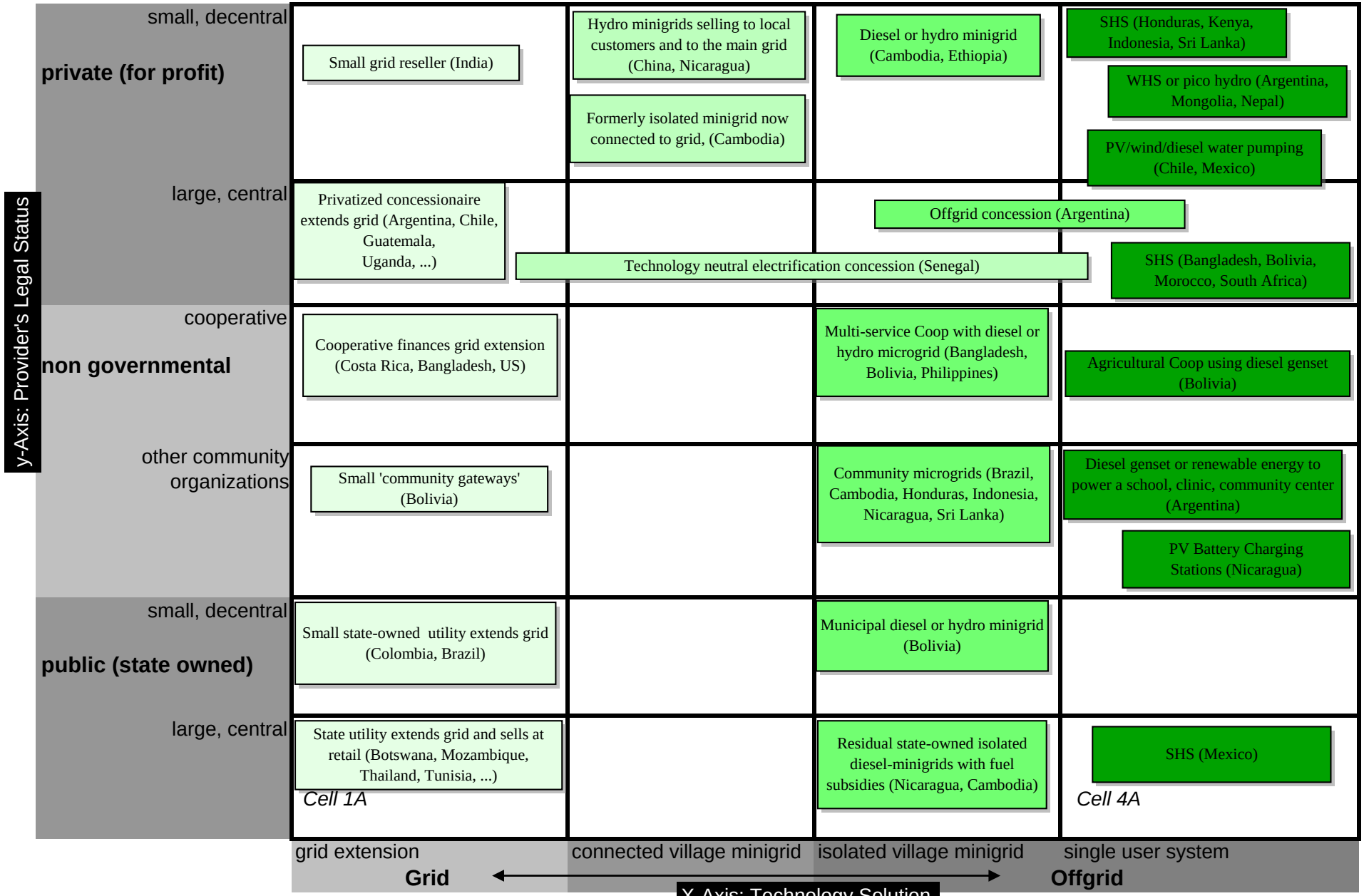


Offgrid Power – What?

	Diesel	Water	Sun	Wind
	>100M >200M	>20M >500M	>10M > 1B	<1M >100M
Person				
HH				
Village				

Source: Own Elaboration

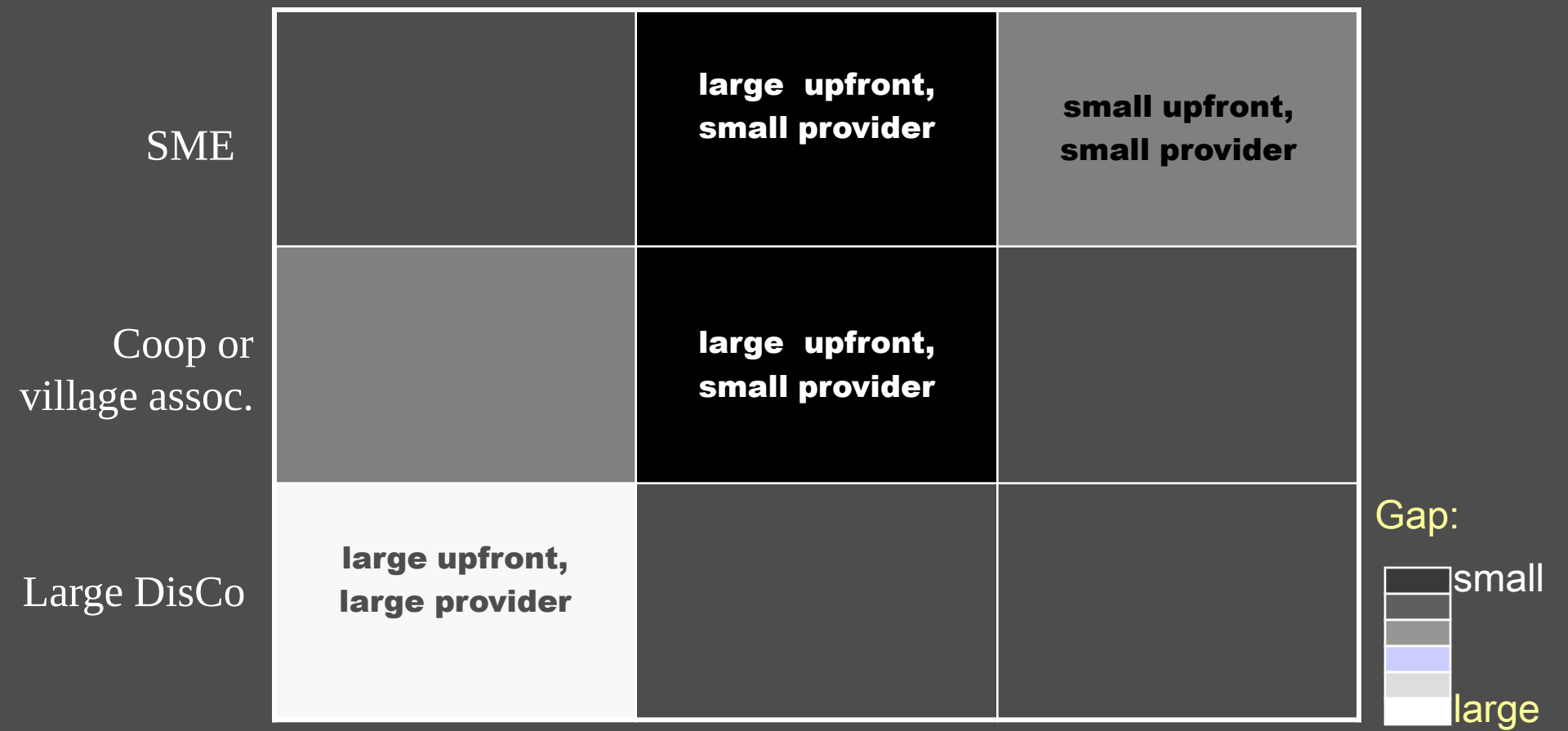
Business Models Differ…



Source: Reiche/Tenenbaum/Torres (2006)

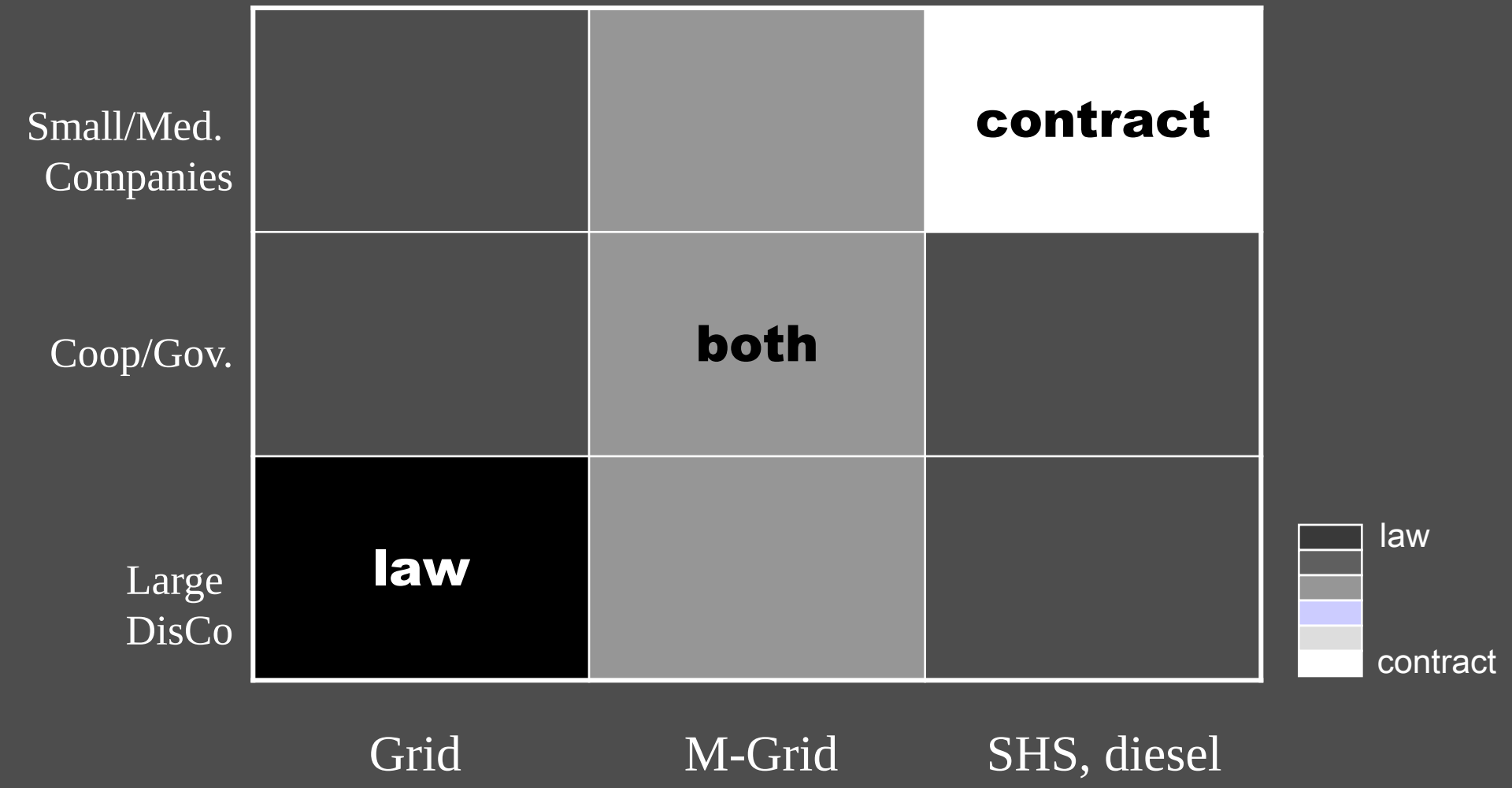
Financing Needs Differ…

Small village grid: High Upfront Costs / Small Company → **financing gap!**



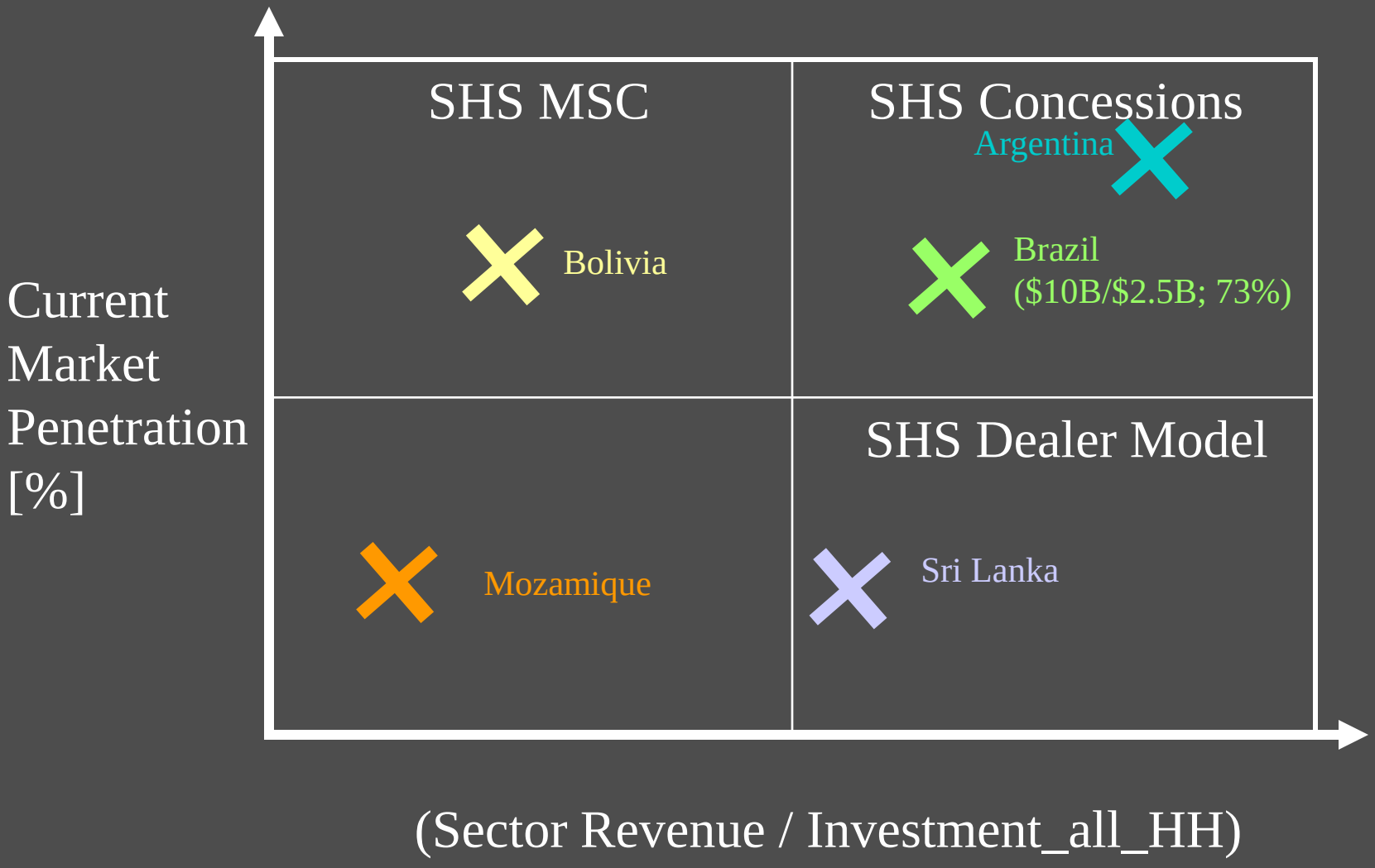
Source: Reiche/Tenenbaum/Torres (2006)

Regulation Differs…



Source: Reiche/Tenenbaum/Torres (2006)

Scale-Up Strategies differ…



Source: Reiche/Rysankova (2005)

Offgrid Power Session – 4 PPTs

	Retrofit + Regulation	Project Developers	Cost: 2$/W	Siting: v^3
Person			PPT2	
HH			PPT1	
Village	PPT4	PPT3		
	Diesel	Water	Sun	Wind

Source: Own Elaboration