




Mini-grid Technology Comparison

	 Micro/min hydro	 Solar-battery	 Solar-battery + diesel	 (solid) Biomass gasifier	 Wind-battery	 Diesel
Range of investment cost USD/kW (generation, distribution)	500 - 10,000	4,000 - 7,000	5,000 - 10,000	1,500 - 10,000 (gasifier, cleaning system, heat exchanger, gas genset, grid)	4,500-13,000	400-1,000
Pure O&M cost (assuming overall system lifetime of about 20 years, without depreciation) as % of investment (depends on equipment quality; battery and diesel genset replacement to be included)	2-5 %			min 10% without fuel cost; daily maintenance required!	5-15% (wind turbine to be replaced in 20 year period!); turbine service once a year → highest O&M cost among RE!	
Range of cost (LCOE) in US Cent per kWh	5-30	40-100	50-100	5-50 (biomass cost!)	60-100	60-120 (fuel price and transport!)

Caption:

Description:

Dimensions: 638 x 335

aperture: 0

credit: Stephanie Theis

camera:

caption:

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