Marshall Islands Electricity Roadmap

Our technology pathways

2018 | 2022 | 2025 | 2030 | 2050

Horizon 1 | Horizon 2 | Horizon 3 | Horizon 4

↓50% GHG | ↓65% GHG | **Net Zero** emissions

Majuro

12-15MW of diesel generators

3 +1MW of solar PV

+ network upgrades

$50m Capital

$.29/kWh LCOE

Waste to energy with either pathway. WTE would need to be retired in order to achieve 100% GHG reduction

Pathway 1 with wind

+12MW of wind turbines

+20MWh of BESS

+ controls, network, enabling tech

$70m Capital

$.29/kWh LCOE

+9MW of solar PV

+ network

$40m Capital

$.29/kWh LCOE

+ biodesel
+ asset replacement
$30m Capital
$.35/kWh LCOE

+ **30MW** of wind
+ **60MW** of solar PV
+ **280MWh** of BESS
+ asset replacement
+ network
$300m Capital
$.55/kWh LCOE

Pathway 2 solar only

+ **25MW** of solar PV
+ **38MWh** of BESS
+ asset replacement
+ network
$100m Capital
$.32/kWh LCOE

+ **5MW** of solar PV
+ **37MWh** of BESS
+ network
$40m Capital
$.34/kWh LCOE

+ **60MW** of solar PV
+ **1050MWh** of BESS
+ asset replacement
+ network
$480m Capital
$.93/kWh LCOE

Ebeye

2.6MW of diesel generators

.6MW of solar PV

~$16m Capital

$.37/kWh LCOE

Pathway 1 with wind

+3MW of wind turbines

+6MWh of BESS

+ controls, network, enabling tech

$14m Capital

$.36/kWh LCOE

+2MW of solar PV

+ network

$6m Capital

$.38/kWh LCOE

+ biodesel
+ asset replacement
$8.4m Capital
$.44/kWh LCOE

+ **4.5MW** of wind
+ **5MW** of solar PV
+ **150MWh** of BESS
+ asset replacement
+ network
$80m Capital
$.90/kWh LCOE

Outer Islands

Mini-grids		Single step design and installation of mini-grids	RE Jaluit, Wotje and possibly other suitable outer islands
Standalone systems	~90%	Improve serviceability and financial sustainability of solar home systems	Consider what other energy service could improve outer-island life

Republic of the Marshall Islands Energy Future