

Supplementary document

Table S1. Capital costs of the proposed RWH system.

Section	Item	Suppliers	Quantity	Cost per Unit	Cost per Section
Rainwater collection	Leaf eaters	The Tank Factory	1 item/house	AUD 70	AUD 615
	First flush diverters	The Tank Factory	1 item/house	AUD 85	
	Downpipes	Reece	1 item/house	AUD 210	
	Stormwater collection pipe (Product code: 1400380)	Reece	60 m/house	AUD 250	
Rainwater storage tank	Rhino rural rainwater tank includes:				
	Tank (25–365 kL)			AUD 6066	AUD 6066
	Pad		1 item if $V_{max} \leq 365$ kL	(25 kL)	(25 kL)
	Dust/vermin proofing seal	Kingspan		–	–
	Fire fittings required by local governments		Multiple items if $V_{max} > 365$ kL	AUD 28,322 (365 kL)	AUD 28,322 (365 kL)
	Tank level gauge				
	Exclusion zone				
Bulk water 10% volume					
Rainwater treatment	pH neutraliser (SKU: WF1034)	Pacific Water Technology	1 item	AUD 2500	AUD 20,410
	Sediment filter (SKU: GT1-8WMW)	Filter Systems Australia	1 item	AUD 260	
	Heavy metal removal filter (SKU: WF021)	Pacific Water Technology	1 item	AUD 5000	
	UV lamp steriliser (SKU: UV0020)	Pacific Water Technology	1 item	AUD 1500	
	Jet pressure pumps (SKU: reef-prj80e)	The Tank Factory	2 items	AUD 575	
	Drinking water storage tank and concrete base (SKU: R13500)	The Tank Factory	1 item	AUD 3000	
	Solar energy system	Local Solar	1 item	AUD 5000	
	Protective fencing	Local Fence	1 item	AUD 2000	
Drinking water supply	Drinking water distribution pipe (Product code: 1450650)	Reece	60 m/house	AUD 275	AUD 375
	Drinking water taps/dispensers	Reece	1 item/house	AUD 100	
Labour	Project manager with construction workers	Local Labour	1 h/house	AUD 100 (AUS) AUD 25 (VN)	

Table S2. Replacement costs of the proposed RWH system.

Replacement Items	Frequency	Cost per Unit
Pipelines	25 years	AUD 525/house
Rainwater tank liner	20 years	AUD 606 (25 kL)–AUD 2832 (365 kL)
Drinking water tank	20 years	AUD 2075
Jet pressure pumps	10 years	AUD 575
Solar micro-inverters	10 years	AUD 1000
Metsorb® filter system	10 years	AUD 5000
Sediment filter	annually	AUD 80
Calcite media	annually (estimated 50 kg/year)	AUD 200
UV lamp	annually (lamp life 10,000 h)	AUD 112

Table S3. Maintenance costs of the proposed RWH system.

Maintenance Items	Frequency	Quantity	Cost per Unit
Roof catchments cleaning service	annually	1 service/house	AUD 30
Rainwater treatment system service	annually	1	AUD 220
Rainwater tank service	5 years	1	AUD 616
Drinking water tank service	5 years	1	AUD 250

Data¹ are the number of households in the community.

Table S4. Economic parameters for use in the LCCA.

Economic Parameters	Australia	Vietnam	Unit
Interest rate	4	4	%
Inflation rate	2.3	4	%
Inflation rate of water	1.7	4	%
GST	10	10	%
Mains water costs (government policy)	2.35	0.85	AUD/kL
Bulk water costs (truck tankers)	120	30	AUD/kL
Bottled water costs (wholesalers)	400	100	AUD/kL