

Supplementary Table 1 Decision matrix showing frequency distribution of severity responses for constraints faced by solar technology adopters

Constraint	Maharashtra					Haryana				
	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5
T1	10	19	20	37	35	4	17	21	44	42
T2	6	15	23	40	36	8	15	22	40	35
T3	8	21	35	42	14	11	19	35	39	16
T4	6	13	17	48	36	7	12	15	50	36
T5	11	11	35	41	22	11	13	33	40	23
T6	13	35	37	25	10	14	34	37	25	10
T7	8	15	20	49	28	5	12	22	51	31
F1	6	7	24	31	52	3	7	25	36	50
F2	11	23	20	37	29	11	23	20	37	29
F3	7	19	17	30	47	3	16	21	33	48
F4	10	17	21	40	32	2	15	20	44	40
F5	16	30	33	26	15	8	33	34	29	16
P1	14	30	28	23	25	14	30	28	23	25
P2	16	17	26	30	31	6	13	29	37	35
P3	8	8	23	34	47	8	8	23	34	47
P4	13	25	26	35	21	13	25	26	35	21
I1	15	9	27	37	32	15	9	30	35	31
I2	7	18	23	38	34	6	17	24	38	35
I3	9	22	25	42	22	0	13	27	46	34
I4	5	10	18	44	44	5	10	18	44	44
I5	10	23	23	36	28	3	12	26	42	38

T1–T7, Technical constraints; F1–F5, Financial constraints; P1–P4, Personal constraints; I1–I5, Institutional constraints.

Supplementary Table 2 Normalized decision matrix for PSI analysis of constraints affecting solar technology adopters in Maharashtra and Haryana

Constraint	Maharashtra					Haryana				
	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5
T1	0.77	0.54	0.54	0.76	0.97	0.29	0.5	0.57	0.86	1.0
T2	0.46	0.43	0.62	0.82	1.0	0.57	0.44	0.59	0.78	0.83
T3	0.62	0.6	0.95	0.86	0.39	0.79	0.56	0.95	0.76	0.38
T4	0.46	0.37	0.46	0.98	1.0	0.5	0.35	0.41	0.98	0.86
T5	0.85	0.31	0.95	0.84	0.61	0.79	0.38	0.89	0.78	0.55
T6	1.0	1.0	1.0	0.51	0.28	1.0	1.0	1.0	0.49	0.24
T7	0.62	0.43	0.54	1.0	0.78	0.36	0.35	0.59	1.0	0.74
F1	0.38	0.23	0.73	0.78	1.0	0.27	0.21	0.74	0.82	1.0
F2	0.69	0.77	0.61	0.92	0.56	1.0	0.7	0.59	0.84	0.58
F3	0.44	0.63	0.52	0.75	0.9	0.27	0.48	0.62	0.75	0.96
F4	0.62	0.57	0.64	1.0	0.62	0.18	0.45	0.59	1.0	0.8
F5	1.0	1.0	1.0	0.65	0.29	0.73	1.0	1.0	0.66	0.32
P1	0.88	1.0	1.0	0.66	0.53	1.0	1.0	0.97	0.62	0.53
P2	1.0	0.57	0.93	0.86	0.66	0.43	0.43	1.0	1.0	0.74
P3	0.5	0.27	0.82	0.97	1.0	0.57	0.27	0.79	0.92	1.0
P4	0.81	0.83	0.93	1.0	0.45	0.93	0.83	0.9	0.95	0.45
I1	1.0	0.39	1.0	0.84	0.73	1.0	0.53	1.0	0.76	0.7
I2	0.47	0.78	0.85	0.86	0.77	0.4	1.0	0.8	0.83	0.8
I3	0.6	0.96	0.93	0.95	0.5	0.0	0.76	0.9	1.0	0.77
I4	0.33	0.43	0.67	1.0	1.0	0.33	0.59	0.6	0.96	1.0
I5	0.67	1.0	0.85	0.82	0.64	0.2	0.71	0.87	0.91	0.86

T1–T7, Technical constraints; F1–F5, Financial constraints; P1–P4, Personal constraints; I1–I5, Institutional constraints.

Supplementary Table 3 Preference variation and overall preference values derived for PSI analysis of adoption constraints

Criteria	Maharashtra				Haryana			
	Δ_j	PV_j	Φ_j	W_j	Δ_j	PV_j	Φ_j	W_j
Technical barriers								
Criterion 1	0.68	0.24	0.76	0.22	0.61	0.40	0.60	0.18
Criterion 2	0.53	0.32	0.68	0.20	0.51	0.31	0.69	0.21
Criterion 3	0.72	0.32	0.68	0.20	0.70	0.34	0.66	0.20
Criterion 4	0.82	0.16	0.84	0.24	0.80	0.17	0.83	0.25
Criterion 5	0.71	0.53	0.47	0.14	0.68	0.47	0.53	0.16
Financial barriers								
Criterion 1	0.63	0.24	0.76	0.19	0.43	0.44	0.56	0.14
Criterion 2	0.64	0.32	0.68	0.18	0.65	0.25	0.75	0.18
Criterion 3	0.70	0.14	0.86	0.22	0.88	0.20	0.98	0.24
Criterion 4	0.82	0.08	0.92	0.24	0.85	0.30	0.97	0.23
Criterion 5	0.67	0.32	0.68	0.17	0.83	0.21	0.85	0.21
Personal barriers								
Criterion 1	0.80	0.14	0.89	0.20	0.73	0.23	0.77	0.19
Criterion 2	0.67	0.31	0.69	0.16	0.63	0.35	0.65	0.16
Criterion 3	0.92	0.02	0.98	0.23	0.91	0.02	0.98	0.24
Criterion 4	0.87	0.07	0.93	0.22	0.87	0.09	0.91	0.22
Criterion 5	0.66	0.18	0.82	0.19	0.68	0.18	0.82	0.20
Institutional barriers								
Criterion 1	0.61	0.25	0.75	0.18	0.39	0.56	0.44	0.11
Criterion 2	0.71	0.33	0.67	0.16	0.72	0.13	0.87	0.21
Criterion 3	0.86	0.06	0.94	0.22	0.83	0.09	0.91	0.22
Criterion 4	0.90	0.02	0.98	0.23	0.89	0.04	0.96	0.24
Criterion 5	0.74	0.13	0.87	0.21	0.84	0.04	0.86	0.20

Δ_j , Mean normalised value of the j^{th} linguistic response category; PV_j , Preference variation; Φ_j , Deviation in preference values; W_j , Overall preference value of the j^{th} linguistic response category; PSI, Preference selection index.