

Index

A

Access to electricity, 3–8

B

Bangladesh, 76–81, 85–91, 93–95, 97, 100, 101

IDCOL, 87–92, 99

PBS, 81, 100, 101

REB, 81, 86, 89, 91, 93, 95, 96

Biodiesel, 41, 66–69

Biogas, 46, 51–56, 58

Biomass, 41, 46–56

biomethanation, 41, 52, 55, 56

gasification, 41, 46–51, 69

Biomethanation

deenbandhu model, 53

digesters, 53, 54, 56, 58

GGC model, 53

KVIC model, 53

Botswana

RECS, 139

Brazil

LpT, 174–176

Business models, 187–190, 218, 222

AMC, 211

cash sales, 189

ESCO, 189, 190, 203, 204, 206, 219

fee-for-service, 189, 203, 205, 206

HPS, 213, 214, 220, 221

IDCOL, 216, 217

leasing, 189

REEs, 216

SELCO, 214, 215, 221

C

Capacity building, 278, 282

CDM, 235, 238–241, 243

China

cultural revolution, 109, 110

economic reform, 108, 116

great leap forward, 109, 110

open door economic policy, 110

TVE, 111, 122, 127

Clean cooking, 3–5, 7

Collective solutions, 273

Colombia

NIZ, 177, 178

Community based schemes, 30

Comparative advantage, 16

Consumer protection, 278, 279

Cross subsidisation, 29

D

Decentralized, 9, 39–42, 46, 68, 70, 71

Development, 13–15, 18–21, 23, 25, 28, 32, 33

direct channels, 15

indirect channels, 16

E

Economic growth, 13–18, 22, 23

bi-variate and multi-variate models, 18

causality, 17–19

livelihood, 23, 24

livelihood approach, 24

pollution, 18, 28, 31

poverty reduction, 13, 20–24, 27

E (cont.)

- private investment, 17
- under investment, 17

Electrification, 157–160, 164–182

- diesel, 160, 163, 166, 170, 174–179
- grid extension, 157, 160, 162, 170, 171, 173–175, 178–180, 182
- mini-grids, 163, 180
- mini-hydro, 160
- off-grid, 157, 161–166, 168, 170–172, 174, 176, 179, 180, 182
- SHS, 162–164, 166, 167, 174–176, 179
- solar PV, 160, 161, 163, 175, 178

Electrification rate, 4**Energy access**

- electricity, 5, 6

Entitlement, 22**F****Funding, 227, 228, 232–234**

- asset-based lending, 245
- barriers, 235, 240–244, 249, 250
- CIF, 235, 239, 246
- FDI, 231–233, 238
- GFCF, 231, 241
- micro-finance, 228, 240, 242, 244, 246–249
- non-recourse financing, 245
- ODF, 231, 233

G**Gasification**

- gasifier, 48–50

GEF, 239, 246**Ghana**

- NES, 134, 135

H**HDI, 6–8****I****India**

- RGGVY, 77, 80, 92, 95

Individual solutions, 273, 275**Indonesia**

- KUD, 162
- PLN, 159, 160, 164

Investment, 228–234, 236–238, 240, 241, 243, 246, 247, 249, 250**M****MFI, 97****MHP. See Micro hydro, 42–46****N****Nepal**

- NEA, 82

O**Off-grid, 8–11, 39, 40, 46, 47, 56, 57,**

- 61, 62, 64, 65, 70
- gasifiers, 84–86, 94
- LED, 83, 84, 87, 100
- micro grid, 84, 100
- micro hydro, 42
- SHS, 81, 83–90, 92, 93, 95, 99

P**Participatory models, 188, 202, 222**

- CBO, 193, 194
- cooperatives, 190–195, 197, 198, 207, 212
- distribution franchisee, 202, 221
- ECS, 208
- franchisee, 199–202
- PPP model, 201–212
- VEC, 209, 211, 290

Philippines

- AMORE, 168
- EC, 166
- NEA, 165, 167, 169
- QTP, 169
- SEP, 166, 167
- SPUG, 160

PoA, 99**R****Regulation**

- rules and standards, 255

Regulatory arrangement, 271, 272, 276, 277

- effectiveness, 272
- exemption, 275, 276
- monopoly, 275, 276
- prior approval, 277, 279
- standardized regulatory approach, 276

Regulatory governance, 253, 254, 257–259,

- 262, 264, 265, 267, 288
- accountability, 253, 259–263
- institutional endowment, 259, 269
- intervention, 253–255, 257, 261, 265, 268
- regulation, 253–261, 264–269

- regulatory space, 257–259, 268
 - regulatory state, 257–259
 - Regulatory capacity, 281, 282
 - Rural electrification, 13–16, 19–21, 23, 25–27, 31–33, 75–77, 79, 86, 90, 96, 104, 106–111, 113–119, 122–126, 131, 133, 134, 136–142, 145, 147–152, 187, 188, 190, 192, 193, 199, 202, 207, 208, 218, 220
 - brightness programme, 112
 - China, 106–126
 - coal, 107, 108, 110, 111, 116, 120, 123, 126, 127
 - funding, 118, 119, 124
 - grid extension, 133, 134, 136, 141, 148, 150, 151
 - income generating activities, 14, 25–27
 - India, 76–78, 84–97, 99–101
 - local governments, 111, 117–119, 123
 - micro-grid, 141
 - mini grid, 195, 196, 207
 - modes of delivery, 114
 - Nepal, 76, 78, 81, 82, 84, 85, 87, 88, 90–95, 101
 - off-grid, 76, 79, 82–85, 87–92, 94–101
 - PV, 136, 138, 141, 143, 144, 146, 149, 150
 - PV systems, 114
 - REA, 135, 138, 145, 148
 - REF, 135, 138, 140, 142
 - SCS, 205, 206
 - SHS, 133, 134, 136, 188, 192, 203, 204, 216, 222
 - small hydropower, 109, 111, 114, 115, 123, 126
 - solar PV, 196, 207
 - South Asia, 75–78, 83, 91, 94, 95, 99, 100
 - sub-Saharan Africa, 131, 132, 150–153
 - tariff, 117, 120, 121
 - Township Electrification Programme, 112–114, 119
 - Sri Lanka, 76–78, 82–84, 86–88, 90, 93, 95–97
 - Rural infrastructure, 14
 - Rural population, 4
 - concession, 140, 141, 153
 - SHP. *See* Small hydro power, 115
 - SHS, 10
 - South America, 157–159, 174, 178–181
 - Brazil, 158, 174–176, 180
 - Colombia, 158, 177, 178
 - Peru, 158, 178, 179
 - South East Asia, 157–159, 166
 - Indonesia, 158–165, 180
 - Philippines, 158, 164–166, 169, 180, 181
 - Thailand, 158, 170–172, 181
 - Vietnam, 158, 172, 173, 181
 - Zambia, 141–147, 150
 - Solar lanterns, 56, 58
 - Solar Photovoltaic, 56
 - SPV. *See* Solar Photo-Voltaic
 - battery charging station, 58
 - SHS, 57, 59, 63
 - Sub-Saharan Africa
 - Botswana, 132, 139
 - Ghana, 131, 132, 134–136, 150, 153
 - Kenya, 144–147, 150
 - LDC, 151
 - Nigeria, 132, 137, 138, 150
 - Senegal, 132, 140, 141, 153
 - South Africa, 131–134, 150–153
 - Tanzania, 142, 147–149
 - SWT, 61–66
 - WHS, 63
- T**
- Tariffs, 14, 27, 29–32, 278–280
 - Thailand
 - PEA, 170, 171
- W**
- Wind diesel hybrid, 63
- V**
- Vietnam
 - EVN, 172, 173
- S**
- SCS. *See* Battery charging station
 - Senegal
 - ASER, 140