

## List of Figures

Figure 1	Egg-Crate Louvres Design	20
Figure 2	Horizontal Projections	20
Figure 3	Spectrally Selective Glazing	21
Figure 4	Service Cores at the Sides of a Building	22
Figure 5	Benefits of Strategic Landscaping to Improve Microclimate at Building Surrounding	22
Figure 6	Example of Vestibule Design	23
Figure 7	Integration of ELV Systems	27
Figure 8	Flow Diagram of Solar Assisted Single-Effect LiBr-H <sub>2</sub> O Absorption Cycle	28
Figure 9	Absorption Chiller and High-Efficiency Evacuated Tube Solar Collectors	28
Figure 10	Illustration of District Cooling System	29
Figure 11	Total Building Energy Efficiency Curve for Singapore	30
Figure 12	Sustainable Transport Goals	38
Figure 13	Trip Mode Share in Jakarta and Tokyo	39
Figure 14	Traffic Jam in East Brebes	40
Figure 15	CO <sub>2</sub> Emission (Fuel Consumption) by Average Speed	41
Figure 16	'Avoid, Shift, Improve' Approach and Measures	42
Figure 17	Example of a Japanese City	42
Figure 18	'Avoid, Shift, Measure' Approach and Measures	44
Figure 19	Example of Demand Simulation in Da Nang, Vietnam	45
Figure 20	Typical Marketing Discussions for 'New Mobility'	46
Figure 21	Example of the Used Car Market in Japan	46
Figure 22	Effectiveness of Fuel Efficiency Standards	47
Figure 23	Fuel Efficiency Regulation Assumptions in the US Market	48
Figure 24	Abatement Costs by Technology in 2030	49
Figure 25	Fuel Demands and GHG Emissions from Road Transport in Brunei Darussalam (1990–2014)	51
Figure 26	Passenger Vehicle Ownership against GDP per Capita of Selected Countries in ASEAN and East Asia	52
Figure 27	Road Transport Energy Demand per 1000 people in Selected Countries in ASEAN and East Asia	53
Figure 28	Growth Change in Passenger Vehicle Ownership in Brunei Darussalam (1979–2014)	54

Figure 29	Graphical Comparisons between the Actual, Gompertz, and Logistic Vehicle Ownership	56
Figure 30	Passenger Vehicles in the BAU Scenario in Brunei Darussalam	58
Figure 31	Penetration of More Efficient Vehicles in Brunei Darussalam	59
Figure 32	Penetration of Electric Passenger Vehicles in Brunei Darussalam	60
Figure 33	Total Energy Demands with Respect to Share of Vehicles by Fuel Type	61
Figure 34	Corresponding Total GHG Emissions	62
Figure 35	Total Energy Demands for FEI Scenarios	63
Figure 36	Corresponding Total GHG Emissions of FEI Scenario	63
Figure 37	Total Energy Demands in FEI + PEV Scenarios	64
Figure 38	Corresponding Total GHG Emissions in FEI + PEV Scenarios	65
Figure 39	Vicious Circle of Vehicle-Oriented Development	66
Figure 40	Power System in Sustainable Society	70
Figure 41	Scalable Evolution of Eco Towns	71
Figure 42	Output Fluctuations of Renewable Energy	73
Figure 43	Grid Integration of Wind and Solar PV	74
Figure 44	Image of Eco Town Before and After Gate Closure	75
Figure 45	Key Technologies of Demand Side Management	78
Figure 46	Hydrogen Production in Wind and Solar Power	78
Figure 47	Applications and Technologies of Electricity Storage	80
Figure 48	Electricity Demand and Price	82
Figure 49	Competitive Power Market	82
Figure 50	Smart Micro Grid System Connected to National Grid	93
Figure 51	Image of Location of Cases in Plane of Average Area Price and Amount of CO <sub>2</sub> Emission	96