List of Figures

Figure 2.1	IEEJ Energy Modelling Framework	3
Figure 2.2	Economic and Energy Model	4
Figure 2.3	Technology Assessment Model (Vehicle Turnover Model)	5
Figure 2.4	Assumptions for GDP and Population	ϵ
Figure 2.5	Outlook for Vehicle Stock	11
Figure 2.6	Sales Share by Powertrain	12
Figure 2.7	Energy for the Road Sector and Total Final Consumption	13
Figure 2.8	Primary Energy Demand and CO2 Emissions	14
Figure 2.9	Energy Self-sufficiency and Net Import Bills	15
Figure 3.1	Powertrain Sales Share in Car by Scenario [Indonesia]	19
Figure 3.2	Powertrain Sales Share in Motorcycle by Scenario [Indonesia]	20
Figure 3.3	Power generation and generation mix [Indonesia]	21
Figure 3.4	Primary Energy Demand and Energy-related CO2 Emissions [Indonesia]	22
Figure 3.5	Well to Wheel by Powertrain in Car in 2040 [Indonesia]	23
Figure 3.6	Energy Self-sufficiency rate and Net Import Bills [Indonesia]	23
Figure 3.7	Impacts on GDP and Consumer prices [Indonesia]	24
Figure 3.8	Investments and Subsidy for xEVs [Indonesia]	25
Figure 3.9	Powertrain Sales Share in Car by Scenario [Thailand]	26
Figure 3.10	Powertrain Sales Share in Motorcycle by Scenario [Thailand]	27
Figure 3.11	Power generation and generation mix [Thailand]	28
Figure 3.12	Primary Energy Demand and Energy-related CO2 Emissions [Thailand]	29
Figure 3.13	Well to Wheel by Powertrain in Car in 2040 [Thailand]	30
Figure 3.14	Energy Self-sufficiency rate and Net Import Bills [Thailand]	30
Figure 3.15	Impacts on GDP and Consumer prices [Thailand]	31
Figure 3.16	Investments and Subsidy for xEVs [Thailand]	32
Figure 3.17	Powertrain Sales Share in Car by Scenario [Malaysia]	33
Figure 3.18	Powertrain Sales Share in Motorcycle by Scenario [Malaysia]	34
Figure 3.19	Power generation and generation mix [Malaysia]	35
Figure 3.20	Primary Energy Demand and Energy-related CO2 Emissions [Malaysia]	36
Figure 3.21	Well to Wheel by Powertrain in Car in 2040 [Malaysia]	37
Figure 3.22	Energy Self-sufficiency rate and Net Import Bills [Malaysia]	37
Figure 3.23	Impacts on GDP and Consumer prices [Malaysia]	38
Figure 3.24	Investments and Subsidy for xEVs [Malaysia]	39
Figure 3.25	Powertrain Sales Share in Car by Scenario [Viet Nam]	40
Figure 3.26	Powertrain Sales Share in Motorcycle by Scenario [Viet Nam]	41
Figure 3.27	Power generation and generation mix [Viet Nam]	42
Figure 3.28	Primary Energy Demand and Energy-related CO2 Emissions [Viet Nam]	43
Figure 3.29	Well to Wheel by Powertrain in Car in 2040 [Viet Nam]	43
Figure 3.30	Energy Self-sufficiency rate and Net Import Bills [Viet Nam]	44
Figure 3.31	Impacts on GDP and Consumer prices [Viet Nam]	45
Figure 3.32	Investments and Subsidy for xEVs [Viet Nam]	46

List of Tables

Table 2.1	Calibration for Indonesia (at 2015 Level)	7
Table 2.2	Calibration for Thailand (at 2015 Level)	7
Table 2.3	Calibration for Malaysia (at 2015 Level)	8
Table 2.4	Calibration for Viet Nam (at 2015 Level)	8
Table 2.5	Fuel Economy in 2017 and 2040 (km/L-gasoline eq.) for Indonesia	S
Table 2.6	Fuel Economy in 2017 and 2040 (km/L-gasoline eq.) for Thailand	9
Table 2.7	Fuel Economy in 2017 and 2040 (km/L-gasoline eq.) for Malaysia	9
Table 2.8	Fuel Economy in 2017 and 2040 (km/L-gasoline eq.) for Viet Nam	10
Table 2.9	Assumptions for List Price in 2017 and 2040 (US\$ / unit)	10
Table 3.1	Alternative Scenarios in the study	18
Table 4.1	Different Modes of PEV Charging	51
Table 4.2	Examples of Slow and Semi-fast Charging Facility Purchase and Installation Costs	55
Table 4.3	Examples of Fast Charging Facility Purchase and Installation Costs	56
Table 4.4	Indicated Average Ratios of Electric Vehicle per Public Charge Point	57