

## List of Abbreviations and Acronyms

ABRI	Australian Biofuels Research Institute
ADB	Asian Development Bank
AEDP	Alternative Energy Development Plan
AFTA	ASEAN Free Trade Area
ANRE	Agency for Natural Resources and Energy
APEC	Asia-Pacific Economic Cooperation
Aprobi	Biofuels Producers Association of Indonesia
ARENA	Australian Renewable Energy Agency
ASEAN	Association of Southeast Asian Nations
ASTM	American Society for Testing and Materials
ATIGA	ASEAN Trade in Goods Agreement
B1	Mix of 1% biodiesel and 99% diesel
B2	Mix of 2% biodiesel and 98% diesel
B5	Mix of 5% biodiesel and 95% diesel
B10	Mix of 10% biodiesel and 90% diesel
B20	Mix of 20% biodiesel and 80% diesel
B25	Mix of 25% biodiesel and 75% diesel
B100	100% biodiesel
BAA	Biofuels Association of Australia
BANZ	Bioenergy Association of New Zealand
BAU	business-as-usual
BDF	biodiesel fuel
BE	bioethanol
BPPT	Agency for the Assessment and Application of Technology, Indonesia
CO <sub>2</sub>	carbon dioxide
CAAC	Civil Aviation Administration of China
CAPEX	capital expenditure
CCS	carbon capture and storage
CCT	clean coal technology
CDM	Clean Development Mechanism
CEPO	Clean Energy Program Office, Singapore
CERP	Clean Energy Research Program
CIF	common intermediate format

CME	coco methyl ester
CNG	compressed natural gas
CNO	coconut oil
CO <sub>2</sub>	carbon dioxide
CP	commonwealth preferences
CPO	crude palm oil
DEDE	Department of Alternative Energy Development and Efficiency, Ministry of Energy of Thailand
DEMRR	Ministry of Energy and Mineral Resource
DME	Energy Self-Sufficient Village Program
DOEM	Department of Environment of Malaysia
DOE	Department of Energy, Philippines
DOST	Department of Science and Technology, Philippines
E3	Fuel mixture of 3% ethanol and 97% gasoline
E5	Fuel mixture of 5% ethanol and 95% gasoline
E10	Fuel mixture of 10% ethanol and 90% gasoline
E15	Fuel mixture of 15% ethanol and 85% gasoline
E20	Fuel mixture of 20% ethanol and 80% gasoline
E25	Fuel mixture of 25% ethanol and 75% gasoline
E85	Fuel mixture of 85% ethanol and 15% gasoline
EAS	East Asia Summit
ECTF	Energy Cooperation Task Force
EFB	empty fruit bunch
EFTA	European Free Trade Association
EIPO	Energy Innovation Program Office, Singapore
EMA	Energy Market Authority, Singapore
EMM	EAS Energy Ministers Meeting
EPA.US	Environmental Protection Agency of United States
EPA	Economic Partnership Agreement
EPPO	Energy Policy and Planning Office, Thailand
ERIA	Economic Research Institute for ASEAN and East Asia
ESP WG	Energy Saving Potential Working Group of ERIA
ETBE	ethyl tertiary butyl ether
EU	European Union
EV	electricity vehicle

FAME	fatty acid methyl esters
FAO	Food and Agriculture Organization of the United Nations
FFV	flexible fuel vehicle
FIT	feed-in tariff
F/S	feasibility study
FTA	Free Trade Agreement
GAIN	Global Agriculture Information Network
GDP	gross domestic product
GEN 2	second-generation biofuels
GHG	greenhouse gas
GMAC	Genetic Modification Advisory Committee
GNS	Institute of Geological and Nuclear Science
GOI	Government of Indonesia
GSP	Generalized System of Preferences
GST	goods and services tax
GSTP	Global System of Trade Preferences
GTA	Global Trade Atlas
HS	Harmonised Commodity Description and Coding System
HSD	high-speed diesel oil
ICRIER	Indian Council for Research on International Economic Relations
IEA	International Energy Agency
IEEJ	The Institute for Energy Economics, Japan
IPCC	Intergovernmental Panel for Climate Change
ITDI	Industrial Technology Development Institute
ITH	income tax holiday
JARI	Japan Automobile Research Institute
JBEDC	Japan Bio-Energy Development Corporation
JDI	Japan Development Institute
JETRO	Japan External Trade Organization
JOil	JOil (Singapore) Pte. Ltd.
JPJ	Road Transport Department, Malaysia
KEN	National Energy Policy
KKPE	Credit for Food and Energy Security
KMUTNB	King Mongkut's University of Technology North

	Bangkok
KPEN-RP	Bio-energy Development and Revitalization of Plantations
KPPK	Ministry of Plantation Industries and Commodities, Malaysia
Lao PDR	Lao People's Democratic Republic
LIPI	Indonesian Institute of Sciences
LIRE	Lao Institute for Renewable Energy
LLC	limited liability company
LNG	liquefied natural gas
LPG	liquefied petroleum gas
MAA	Malaysian Automotive Association
MAFF	Ministry of Agriculture, Forestry and Fisheries, Japan
MAI	Ministry of Agriculture and Irrigation, Myanmar
MEWR	Ministry of the Environment and Water Resources, Singapore
METI	Ministry of Economy, Trade and Industry, Japan
MFN	most favoured nation
MIC	Myanmar Investment Committee
MOE	Ministry of Energy, Myanmar
MOMG	Malaysian Oleochemical Manufacturers Group
MPOB	Malaysia Palm Oil Board
MPP	minimum purchase price
MS	methyl esters (Malaysian Standard on Biodiesel)
MSP	minimum support price
MTI	Ministry of Trade and Industry, Singapore
NBB	National Biofuel Board, Philippines
NBPM	National Biofuel Policy, Malaysia
NBPP	National Biofuel Policy, Philippines
NCCC	National Climate Change Committee, Singapore
NDRC	National Development and Reform Commission, China
NEA	National Environment Agency, Singapore
NOLCO	net operating loss carry over
NPC	National Power Corporation
NSTDA	National Science and Technology Development

	Agency
NZEECS	New Zealand Energy Efficiency and Conservation Strategy 2011-2016
NZES	New Zealand Energy Strategy, 2011-2021
NZFOA	New Zealand Forest Owners Association
OAM	Office of Agricultural Economics
OCSB	Office of Cane and Sugar Board
OECD	Organisation for Economic Co-operation and Development
OMC	oil marketing companies
PCA	Philippine Coconut Authority
PCAMRD	Philippine Council for Aquatic and Marine Research and Development
PCIERD	Philippine Council for Industry and Energy Research and Development
PCRDF	Philippine Coconut Research Development Foundation PEN, Blueprint for National Energy Plan; PEN 2005 ~ 2025
PETRONAS	Petroliam Nasional Berhad
PI	Presidential Instruction
PLN	Perusahaan Umum Listrik Negara
PM	particulate matter
PME	palm methyl esters
PMK	Regulation of the Ministry of Finance
PNOC-ERDC	Philippine National Oil Company–Energy Research and Development Center
PNS	Philippine National Standards
PPKS	Centre for Oil Palm Research, Medan
PPO	pure plant oil
PPP	public–private partnership
PSI	pollutant standards index
PSO	public service obligation
PTC	Philippine Tariff Commission
PTT	Petroleum Authority of Thailand
PV Oil	PetroVietnam Oil
RA	Republic Act (of the Philippines)
RBD	refined, bleached and deodorised

R&D	research and development
RD&D	research, development, and demonstration
RE	renewable energy
REDP	Renewable Energy Development Plan
RFS	renewable fuel standards
RITE	Research Institute of Innovative Technology for the Earth
RPS	renewable portfolio standards
SIRIM	Standards and Industrial Research Institute of Malaysia
SNI	Standar Nasional Indonesia
SO <sub>2</sub>	sulfur dioxide
STL	shale-to-liquids
SVO	straight vegetable oil
SWG	sub-working group
TBO	tree-borne oilseeds
TCPPA	Technical Committee on Petroleum Products and Additives
TimNas	National Team for Biofuels Development
BBN	
TISTR	Thailand Institute of Scientific and Technological Research
TLL	Temasek Life Science Laboratory
TPES	total primary energy supply
UAC	Universal Absorbents and Chemicals
UGR91	Gasoline Octane 91
UPV	University of the Philippines at Visayas
UPLB	University of the Philippines in Los Banos
U.S./US	United States
USDA	United States Department of Agriculture
VAT	value-added tax
VPI	Vietnam Petroleum Institute
WG	working group
WTO	World Trade Organization
UNIT	

bbbl	barrel
GW	gigawatt
ha	hectare
kg	kilogram
kL	kilolitre
ktoe	thousand tonnes of oil equivalent
kW	kilowatt
kWh	kilowatt-hour
L	litre
ML	million litre
Mtoe	million tonnes of oil equivalent
MtC	million tonnes carbon (may be converted to million tonnes of CO <sub>2</sub> by multiplying by 44/12)
MW	megawatt
MWh	megawatt-hour
NCV	net calorific value
PJ	petajoules
tC	tonnes of carbon
toe	tonnes of oil equivalent
TWh	terawatt-hour
µg/m <sup>3</sup>	microgram/cubic meter

## CURRENCY

A\$	Australian dollar
NZ\$	New Zealand dollar
RM	Malaysian ringgit
Rp	Indonesian rupiah
Rs	Indian rupee
S\$	Singapore dollars
THB	Thailand baht
US\$	US dollar
VND	Vietnamese dong